SOUTHERN RHODESIA

REPORT

on the

PUBLIC HEALTH

For the Year 1949

PRESENTED TO THE LEGISLATIVE ASSEMBLY

1950

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REPORT
on the
PUBLIC HEALTH

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MEDICAL DIRECTORS OF SOUTHERN RHODESIA

(*Left to right*)

Dr. Andrew Paton Martin, O.B.E. (1935-1946)

Dr. Andrew Milroy Fleming, C.M.G., C.B.E. (1897-1930, *died* 1953).

Dr. Richard Murchison Morris, O.B.E. (1946-present date).

Dr. Robert Arthur Askins (1930-1935, *died* 1935).

Report on the Public Health for the Year 1953

To the Minister of Health,

Sir,

I have the honour to submit the Annual Report of the Department of Health for the year 1953.

I have the honour to be, Sir, your obedient servant,

R. M. MORRIS,
Secretary for Health.

1st April, 1954.

INTRODUCTION

This annual report for the year 1953 is of special importance for two reasons. Firstly, it is probably the last report on the Public Health which will deal with Southern Rhodesia alone since, by next year, Health will be a function of the Federal Government. Secondly, the year marks the end of 60 years of a medical service in the Colony. Prior to 1894, medical work was done by the Pioneer doctors and by the devoted bands of nursing Sisters—religious and lay, but in that year Andrew Fleming was appointed to Salisbury as Resident Surgeon. In 1953 he died, having seen the development of medical services on an organized system throughout the period, although he had relinquished control in 1930.

When he came to Salisbury there were hospitals only in Salisbury, Bulawayo, Umtali and Fort Victoria, and only the first of these was in a permanent building.

In 1897 he became Medical Director and had under his control 14 medical officers (including the Medical Officers, B.S.A. Police) and there were six hospitals.

The system then in vogue, and which obtained until after Responsible Government in 1923, was one of district surgeons or subsidized medical practitioners, but Fleming set up a service of medical officers to serve the Colony, details of the present state of which appear later in this report, the 52nd to be presented since the first was to the Legislative Council in 1901.

Although no allusion is made elsewhere in this Report to the arrangements for bringing Health matters under the Federal Government, in fact a considerable amount of work was done throughout the latter half of 1953 to find the best way of producing a unity of control of what have hitherto been three separate Medical Services and yet preserve the best features of each. It is certain that whilst a small central nucleus is essential, the maximum degree possible of decentralization in actual administration must be the rule. In an area larger than France, Belgium, the Netherlands, Spain, Portugal and Switzerland, and with difficulties of communication to the outlying areas, the local problems are bound to differ in degree and in kind, and therefore the system to be adopted must allow for these problems to be tackled and solved by differing methods, and that can only be achieved by decentralization.

The vital statistics which follow in detail in the body of the Report are in no instance as favourable as in the previous year, nevertheless, in so far as the European section of the population is concerned, they are not unsatisfactory, except for one feature. In Chapter I will be found a reference to a new approach to the consideration of deaths. From that it will be seen that some improvement is evident in the classes of causes of deaths over which a Department of Health may hope to have some control but the deaths from Violence, more particularly from accidents involving motor vehicles and more particularly involving the young whose lives are before them, is an appalling state of affairs. There is little in this respect which a Department of Health can do directly, but no report of this nature would be fulfilling its function if it did not attempt to stir the public conscience to the imperative need to take urgent action to prevent this wastage, not forgetting the heavy load of tragedy which accompanies the loss of life. Nor is that by any means the whole picture. Every day in every hospital in the Colony patients are admitted as the result of similar accidents. The economic loss to the Colony represented by this loss of labour, by the expense of treatment, by the inevitable percentage of permanent disability and by the suffering endured by patients and their families, even when life is saved, should surely be sufficient warrant for action at whatever cost to stem this rising tide, compared with which the havoc of malaria or bilharzia is almost insignificant.

In the field of preventive medicine and sanitation it is pleasing to note the progress made by the smaller local authorities in the provision of wholesome water supplies and of water-borne sewerage. At the same time the need for foresight in the planning of these services should be stressed. With

the rapid increase in populations served, there is a grave risk that the sewage works will be overwhelmed if their extension is not planned to keep pace with both the increase in population and with the ready availability of water supplies, the latter being a potent factor in the sudden increase in the " dry weather flow " arriving at the sewage works.

Training facilities for nurses and for auxiliary nursing aides continue to increase.

The two European nurse-training schools are receiving a sufficiency of applicants for training, although the wastage during this period remains high.

During 1953, the first group of Coloured and Asian student nurses were accepted into the Salisbury Preliminary Training School preparatory to the opening of the Princess Margaret Hospital, due to take place early in 1954. Some difficulty is experienced in getting girls of the requisite educational standard to cope with the theoretical subjects of the nursing course but it is expected that with the gradual expansion of the secondary schools for Coloureds and Asians, a better selection of students may be possible.

In contrast, there is a very large increase in the applications for training as nursing auxilaries or orderlies from Africans and with the increase in the training facilities at both Government institutions and at Medical Missions, there is a very real risk of over-production of trained auxiliaries for the posts available in spite of the increased use of these groups, not only in Government and local authority hospitals and clinics, but in private clinics on farms and in industrial work.

It seems probable that some restriction may need to be placed on the numbers to be accepted for training, since the African has not yet appreciated the fact that vacancies are bound to be given to the better workers, they are only too prone to the view that the mere acquisition of the qualification as an auxiliary entitles them as a right to secure employment and that at the place of their own selection.

With regard to trained professional staff, the position has been more satisfactory than for some time past. Recruitment of medical officers and dental surgeons has been better than expected, and it is hoped, will remain so in spite of considerable expansion in several directions. With regard to trained nurses, the position has been even better. This is partly due to the availability of suitably qualified married women in most centres, but also to the policy which has now been adopted by using fully qualified African women to staff the main African hospitals under a minimum of European supervision. In the main these African trained nurses and midwives are learning to accept the responsibility of taking charge of wards, and in some instances are proving very efficient.

Individual Diseases

With the continuation of the residual insecticide campaigns, the malaria problem is progressively becoming less acute as the figures in the body of the Report show.

There are very real risks that inadequate dosage of BHC or DDT, when applied without supervision or control will lead to resistant strains of mosquitoes, but the benefits to be gained are so apparent to the African population—even where these benefits are looked at more from the point of view of personal comfort than from the malaria angle—that it is inevitable that Native Councils and even individuals will insist on spraying. The Department of Health offers all the assistance possible in supervision and in training of personnel in order to lessen these risks.

The position with regard to Leprosy continues to improve with the wider application of sulphone treatment. Although fairly large numbers of patients voluntarily present themselves for treatment in the two leprosaria, the results of modern treatments are so good that discharges outnumber the admissions. It is felt that as the value of the new treatment spreads to the more remote districts—as is already happening—more and more early cases will come forward. To encourage this, a film and film strips are about to be prepared for showing at African gatherings in an attempt to educate the public in the desirability of seeking treatment early, and in the excellent chance of cure under modern conditions. With the relatively small number of total cases in the Colony, there is some hope that this disease will ultimately be reduced to negligible proportions, especially if it becomes possible, ultimately, to pin-point foci of infection and have these carefully surveyed by examiners well experienced in the earliest manifestation of the disease.

Fortunately, the year 1953 saw a marked remission in the incidence of Acute Poliomyelitis following the relatively severe experience in earlier years. To some extent, this may be due to lessened immigration, but a more probable explanation is that the previous epidemics have given rise to a high proportion of immunes in the general population, which immunity was acquired by a mild infection with the virus not recognized as such because it did not give rise to the complication of involvement of the central nervous system.

On the other hand, Pulmonary Tuberculosis shows a much less pleasing picture. Whilst the position in Europeans remains static at a fairly reasonable level, the incidence in Africans, especially in the Midlands, gives grounds for disquiet. This incidence is not in epidemic form but is most apparent in the urban areas on mines.

Every effort has been made to provide additional special accommodation both in Government institutions and by subsidizing medical missions willing to accept this additional responsibility, but there is still a considerable shortfall.

At the same time, there has been, in spite of lack of special staff and accommodation, an increase in the campaign of Tuberculin—testing and BCG immunization. This has not only been

done for those with greater than normal risk, such as nurses and nursing orderlies, but also for school children in urban areas and for a few groups of industrial employees. In one or two instances, mine medical officers have also agreed to carry out tests and inoculations for their personnel. The Municipality of Salisbury has, through the Medical Officer of Health and his staff, co-operated wholeheartedly in the scheme.

During the year, arrangements were completed, thanks to the enthusiasm of the Rotary Club in Salisbury, who will collect the funds, to set up a pilot-scheme chest clinic in Salisbury. It is proposed that at this clinic, batches of children and of employees in industry will be brought at stated intervals. They will be Mantoux tuberculin tested with a Standard 5 T.U. injection. On their return 72 hours later those negative (less than 6 mm. induration at site of injection) will be given BCG vaccination. Those positive, will be transferred for an investigation which will include a clinical examination and a miniature X-ray. It is hoped in this way, both to raise the resistance of the negative reactors and to collect cases at the earliest stage when treatment will be more helpful and less costly. In the meantime, the experimental methods of clinical treatment carried out at the Martin Sanatorium, Chindamora Reserve, are showing very good results when combinations of the drugs are given in monthly courses with monthly intervals.

Treatment facilities for illness in general are improving both in quality and in amount. For Europeans it is now obvious from the hospital returns that better value is obtained for expenditure by concentrating on expansion in the main centres, and therefore it is recommended that a halt should be made in the provision of costly and less useful, if in some cases more convenient, cottage hospitals.

The position for Africans is improving in numbers of beds, but the quality of the service will be greatly improved when the two new 650-bedded hospitals in Salisbury and Bulawayo now building become available.

Personal

Dr. Andrew Milroy Fleming-Bernard, C.M.G., C.B.E., died in Scotland on November 6th, 1953. It is difficult to over-estimate the part he played in providing the Colony with medical and health services. Selected by Dr. Jameson himself, to come to Salisbury in 1894 as Resident Surgeon, he was the first medical practitioner in the whole-time employment of the B.S.A. Company.

Over the Christmas period of that year he was the only medical man between Umtali and Gwelo—a distance of over 350 miles. During the Rebellion of 1897 he was in medical charge of the laager of women and children and also surgeon for those wounded or infirmed in action. For these services he was awarded the C.M.G.

In 1897 he was officially styled Medical Director of the Colony, and set about organizing the appointment of District Surgeons and Nursing Staff, the erection and maintenance of hospitals, the institution of sanitation in the townships, the provision of health legislation and the control of health services in general. All the while he was also engaged as the only surgeon in Mashonaland and in the day to day superintendance of the Salisbury Hospital.

It was typical of his appreciation of his dual role that during one leave he took the F.R.C.S. of Edinburgh and the D.P.H. During the First World War he saw service in Europe, including anti-typhus and other public health work in Russia.

On his return to the Colony, the expansion which followed that War and the subsequent grant of Responsible Government in 1923 gave him opportunities which he whole-heartedly seized, to set up the Medical and Nursing Services very much in the form they exist to-day.

He retired in 1931 after 37 years of pioneering medicine and surgery with a record of administrative achievement it would be difficult to rival anywhere in the World. The Colony should ever keep his memory green in appreciation of services of a very high order which he gave so unstintingly to a country he loved.

Chapter I.—VITAL STATISTICS

(1) *Population of Southern Rhodesia.*

Following the precedent of former reports, comparisons are made whenever possible with the data published in reports of ten and twenty years ago; 1943 and 1933.

The population of the Colony in the inter-censul years is estimated as at 30th June each year:

	1953	1943	1933
Europeans	158,500	81,470	52,000
Asiatics	4,700	2,790	1,892
Coloured Persons	6,700	4,040	2,716
Africans	2,090,000	1,488,000	1,103,050
	2,259,900	1,576,300	1,159,658

In the earlier years of this century the African population doubled itself in something over 30 years; now it doubles itself in a little over 20 years.

(2) *Summarized Vital Statistics.*

The vital statistical information regarding the European population is given below:—

	1953	1943	1933
Estimated population	158,500	81,470	52,000
Rate of natural increase per 1,000	21·4	14·4	13·0
Gross number of immigrants	10,272	473	1,670
Of which R.A.F. and dependants numbered	199	—	—
Number of Births	4,376	1,878	1,119
Illegitimate births included above	48	33	21
Annual birth rate per 1,000	27·6	23·1	21·5
Number of deaths	976	712	441
Crude annual death rate per 1,000	6·2	8·7	8·5
Number of infant deaths	110	75	61
Infant mortality per 1,000 live births	25	40	55
Still births (not included in births or deaths)	60	31	31
Number of maternal deaths	6	7	7
Maternal mortality rate per 1,000 live births	1·4	3·7	6·2

(3) *European Birth Rates.*

Rate per 1,000—	1953	1943	1933
Southern Rhodesia	27·6	23·1	21·5
England and Wales	15·5	16·3	14·4
Union of South Africa	25·8 (*a*)	26·2	23·7

(*a*) Estimated from 10 months' figures.

(4) *European Infant Deaths.*

(i) Causes of Death, 1944–1953.

Disease	*No. of Deaths*	*Percentage of Total*
Premature birth and diseases of early infancy	601	64·76
Bronchitis and pneumonia	70	7·54
Diarrhoea and enteritis	86	9·27
Malaria	46	4·96
Measles, whooping cough, diphtheria, dysentery	18	1·94
Various, not classified above	107	11·53
Total	928	100·00

(ii) Deaths During Different Months of Age, 1944–1953

	No. of Deaths	*Percentage of Total*
First month	606	65·30
2 months to 6 months	183	19·72
6 months to 12 months	139	14·98
Total	928	100·00

(iii) Causes of Infant Deaths, 1953

International List No.	*Cause of Death*	*Number of Deaths*
A. 2	Tuberculosis of meninges and central nervous system	1
A. 15	Brucellosis (undulant fever)	1
A. 23	Meningococcal infections	1
A. 37	Malaria	2
A. 78	All other diseases of the nervous system and sense organs	1
A. 82	Other diseases of heart	1
A. 86	Other diseases of circulatory system	1
A. 103	Intestinal obstruction and hernia	2
A. 104	Gastro-enteritis and colitis, except diarrhoea of the new-born	9
A. 127	Spina bifida and meningocele	3
A. 128	Congenital malformation of circulatory system	2
A. 129	All other congenital malformations	11
A. 130	Birth injuries	16
A. 131	Post-natal asphyxia and atelectasis	9
A. 132	Infections of new-born	4
A. 133	Haemolytic disease of new-born	3
A. 134	All other defined diseases of early infancy	2
A. 135	Ill-defined diseases peculiar to early infancy and immaturity unqualified	34
A. 90	Broncho-pneumonia	3
A. 91	Primary atypical other and unspecified pneumonia	1
A. 137	Ill-defined and unknown causes of morbidity and mortality	1
A.E. 138	Motor vehicle accidents	1
A.E. 147	All other accidental causes	1
	Total	110

(iv) Infant Mortality Rates

Rate per 1,000 live births:	1953	1943	1933
Southern Rhodesia	25	40	55
England and Wales	27	49	64
Union of South Africa	(*a*)	48	60

(*a*) Not available

(5) *European Deaths*

(i) Causes of European Deaths, 1949–53

	1953	1952	1951	1950	1949	*Total*	*Percentage of Total*
1. Cancer	166	141	163	121	129	720	15·98
2. Violence	121	114	119	113	81	548	12·16
3. Heart diseases	198	202	183	182	152	917	20·36
4. Pneumonia and bronchitis	39	46	28	28	29	170	3·77
5. Malaria and blackwater fever	7	14	17	14	18	70	1·55
6. Nervous diseases	90	106	101	77	83	457	10·14
7. Premature birth and diseases of early infancy	87	70	78	78	65	378	8·39
8. Tuberculosis (all forms)	12	8	8	11	13	52	1·15
9. Influenza	3	2	3	8	6	22	0·49
10. Diarrhoea and enteritis	12	9	10	13	10	54	1·20
11. Old age	10	11	9	9	6	45	1·00
12. Enteric fever	1	—	1	3	5	10	0·22
13. Diphtheria	—	8	1	4	4	17	0·38
14. Dysentery	1	1	2	8	2	14	0·32
15. Whooping cough	1	—	2	—	1	4	0·09
16. Measles	1	—	1	1	1	4	0·09
17. Scarlet fever	1	—	—	—	—	1	0·02
18. Other causes	226	172	231	190	203	1,022	22·69
Totals	976	904	957	860	808	4,505	100·00

Detailed causes of deaths of Europeans appear at Appendix C, classified in accordance with the International Classification.

(ii) The Economic Aspects of Death

In a recent health report issued by the State of Western Australia, Dr. Snow, an epidemiologist, describes a novel way of examining mortality rates from different causes. His method is, in brief, as follows: He points out that neither the actual numbers of deaths nor the death rate are of value in computing the "years of useful life lost" or the economic loss to the community by death, since 40 deaths at age 59 years are from this point of view equivalent to a single death at age 20 years.

In his method he only includes males in his calculations, since they are in the main the wage-earners, and of these he excludes those under the age of 10, since infant and child deaths complicate the pattern, and also those over the normal retiring age—65 in Western Australia, but 60 for Southern Rhodesia.

In Western Australia the numerical sequence of actual numbers of deaths shows heart disease and cancer to occupy the leading positions, but if the computation is based on years of useful life lost the importance of these causes of death diminishes since in the main they affect the higher age groups. Instead the lead by a long way is taken by "automobile accidents" and "other accidents". A similar study has been made of the Southern Rhodesia causes of death in males aged 10–59 years in 1953.

A total of 216 deaths contributed 3,842 useful years lost (60 minus age at death in each case).

It happens that the five main causes of death in Southern Rhodesia are also the five main causes of useful years of life lost, but the variation in the sequence is well shown in the following table:

Rank	*Number of Deaths*	*Cause of Death*	*Useful Years Lost*	*Rank*
1	37	Arteriosclerotic and degenerative heart disease . . .	324	5
2	30	Malignant neoplasms	412	4
3	27	All other accidents	815	1
4	22	Automobile accidents	560	2
5	18	Suicide	444	3

Expressed in another way, each death from heart disease represents 8·76 years of useful life lost while each accident death represents 28·06 years lost. It is so very obviously the duty of a Health Department to draw, with the greatest emphasis, attention to these violent causes of mortality, since it cannot be accepted that this economic drain on the country is not to a very considerable extent preventable. When the Health Department is also the authority for the maintenance of hospitals, this duty becomes even more pressing, since the mortality figures alone give but one portion of the picture. These same causes of mortality are also main contributors to the national morbidity, more especially of the morbidity which requires elaborate hospital facilities and accommodation for treatment and rehabilitation, thus constituting a heavy burden on accommodation and staff.

Finally, it is obvious that even the best that the hospitals can provide must still leave a very large margin of economic loss, since many of the survivors of accidents are to a greater or lesser extent disabled or economically less useful than they would otherwise have been.

If in this account the economic aspects have been stressed it is not because the Department of Health is not fully aware of the human aspects of the suffering and tragedy involved, and is not fully in sympathy with both victims and the bereaved.

(6) *Maternal Mortality.*

EUROPEAN MATERNAL DEATHS, 1944 – 1953

International List Number	*Cause of Death*	*Number of Deaths*	*Percentage of Total*
A. 115	Sepsis of pregnancy, childbirth and the puerperium	8	13·79
A. 116	Toxaemias of pregnancy and the puerperium	14	24·14
A. 117	Haemorrhage of pregnancy and childbirth	12	20·69
A. 118	Abortion without mention of sepsis and toxaemia	2	3·45
A. 119	Abortion with sepsis	1	1·72
A. 120	Other complications of pregnancy, childbirth and puerperium	21	36·21
	TOTAL	58	100·00

It did not seem possible that more confinements could take place in maternity hospitals and homes, but in fact, a record of 93·6% of births took place within an institution.

The still birth rate as a percentage of total births also reveals a significant excess in the case of domiciliary midwifery, 27·7 as compared with 12·6 in institutions.

The interpretation of these figures requires careful thought. It is only a very few of the general population who deliberately arrange for confinements to take place at home, partly because, to reproduce there, the major facilities of a well-run maternity home, is extremely expensive, hence the majority of deliveries at home are of patients who have neglected to make proper arrangements for the confinement.

With the Maternity benefits scheme operating, there is no reason for this neglect to secure adequate ante-natal care as well as skilled attention during labour.

Chapter II.—INFECTIOUS AND COMMUNICABLE DISEASES

(1) *Notification of Infectious Diseases.*

The following notifications of infectious disease were made to the Health Department during 1953:—

Disease	Europeans		Non-Europeans	
	Cases	Deaths	Cases	Deaths
1. *Quarantinable Diseases*—				
(International Sanitary Regulations)—				
* Cholera	—	—	—	—
* Plague	—	—	—	—
* Smallpox	—	—	11	—
* Typhus fever (exanthematous)	—	—	—	—
* Yellow fever	—	—	—	—
2. *Tuberculosis and Silicosis*—				
* Pulmonary tuberculosis	35	4	1,282	164
* Non-pulmonary tuberculosis	4	—	278	84
* Silicosis with active tuberculosis	4	2	7	2
3. *Infectious Diseases of Childhood*—				
* Chickenpox	305	—	557	—
German measles	6	—	—	—
Measles	219	—	70	1
Mumps	18	—	51	—
Whooping cough	5	—	62	3
4. *Virus Encephalitis Group*—				
* Acute anterior poliomyelitis (including polio-encephalitis)	17	1	11	4
5. *Bacterial Infections*—				
* Anthrax	—	—	2	—
* Scarlet fever	71	—	—	—
Tetanus	—	—	1	—
* Erysipelas	3	—	2	1
* Puerperal septicaemia	—	—	7	2
* Cerebro-spinal meningitis	9	3	244	39
Meningitis — other organisms	—	—	6	3
* Diphtheria	68	1	355	59
* Typhoid fever	29	2	154	16
* Paratyphoid fever	4	—	3	—
6. *Miscellaneous*—				
Relapsing fever (tick borne)	—	—	1	—
Trachoma	—	—	24	—
* Trypanosomiasis	—	—	9	—
* Undulant fever	2	—	4	—
* Rabies	—	—	3	3

* Indicates diseases which are notifiable infectious diseases under the Public Health Act.

(2) *Malaria and Blackwater Fever.*

On past experience, the season 1952–53 should have been a year of high malaria morbidity, the rainfall being so distributed that breeding of the mosquito vectors should have been heavy. In fact, conditions were very similar, climatically, to those in 1943. The malaria picture was, however, very different. In 1943 there were 2,277 cases of malaria and blackwater fever treated in Government European Hospitals, a hospital morbidity rate of 28 per 1,000 of the population.

In 1953 there were 655 such cases, representing a morbidity rate of 4·2 per 1,000. There seems little doubt that a great deal of the improvement in this connection is due to the wider application of residual insecticides to dwellings as an anti-malaria measure. The areas covered by organized residual insecticide spraying programmes, continues to increase each year, and it is estimated that roughly 300,000 persons are now protected from malaria by *each* of the following:—

(*a*) by living within local authority areas where malaria control is exercised by residual spraying and larval control;
(*b*) by the operation of malaria and bilharzia control units of the Health Department operating in Native Reserves; and
(*c*) by various co-operative schemes operated by communities and Native Councils with advice and assistance, and sometimes with the loan of spraying equipment and staff from the Health Department.

It is considered that at least another 100,000 people are protected by schemes operated by smaller local authorities, farmers' associations and mines, which represents approximately one million people protected, or about half the total population of the Colony. The quality of the work done in categories (*a*) and (*b*) above is first class and a high degree of protection, lasting for the whole of the malaria transmission season, is given. The work done by the organizations in category (*c*) is, however, very uneven, and there is no doubt that much effort and material is being wasted or misdirected. Much of this trouble is due to the natural desire of the administration to make the community protected pay at least a part of the cost of the service. A number of different methods of treating the problem have been tried. In some native areas, Councils have employed staff to carry

out the spraying, but there has been a tendency to employ too few persons, so that to cover the work, spraying has to go on throughout the year, even in the winter months when no transmission normally occurs. The Councils have no means of keeping a check on the efficiency of the spraying, other than an idea of the quantities of BHC wettable powder which have been purchased. There is no doubt that in the present stage of development in Native Reserves, the most certain and economical method of protecting the population from malaria, is by using a spraying team under direct European supervision.

Any other means of control results in a less complete and slower programme of work. The morbidity and mortality experience of the European population of the Colony in recent years is rather interesting. The proportion of the total deaths registered, which is due to malaria and blackwater fever, has fluctuated around ten per cent. for many years, but since the end of the 1939–45 War there has been a decided downward trend.

Period	*Malaria and B.W.F. Deaths*	*Total Deaths*	*Percentage*
1929-33	190	2,255	8·43
1934-38	268	2,727	9·83
1939-43	262	3,277	8·00
1944-48	168	3,648	4·61
1949-53	70	4,505	1·55
1953	7	976	0·72

Apart from the overall improvement here shown, the reduction in the number of deaths from these diseases has the greater significance when it is remembered that, in the past, their ill-effects were mainly on the younger and economically, most productive age groups. There has also been an appreciable reduction in the morbidity caused which can be most easily measured by examining the hospital admissions and deaths from malaria and blackwater fever occurring in hospitals.

Period	*Malaria and B.W.F.*		*Malaria and B.W.F. Cases and Deaths per cent. of Total Admissions and Total Hospital Deaths*		*Malaria and B.W.F. Annual Hospital Morbidity Rate per* 1,000
	Cases	*Deaths*	*Cases*	*Deaths*	
1944-48	5,932	86	9·4	4·9	14·2
1949-53	4,750	31	5·6	1·6	6·9
1953	665	5	3·6	1·2	4·2

There is no evidence from observations which have been made that either of the two principal mosquito vectors have acquired any resistance to benzene hexachloride, over the course of five years this insecticide has been applied on a fairly considerable scale. The dosages which have been applied have been high, much higher than the dose thought adequate five years ago, but which is now accepted in most countries using benzene hexachloride. The quantities of DDT used as a residual insecticide against malaria in this Colony over the period of operations, has been relatively very small. It is for this reason, if for none other, that residual spraying programmes must be closely supervised by Europeans familiar with the objectives and methods. Inadequate and poorly applied dosages of BHC will almost certainly be the cause of the development of resistance by *Anopheles gambiae* and *funestus*.

(3) *Bilharziasis.*

The malaria and bilharzia control units continued their operations in Native Reserves during the winter of 1953. Copper sulphate was applied to streams and pools where the contact of the human population with surface water was a real danger. All village water supplies at streams, dams, village bathing sites, road and footpath crossings of streams were treated with copper sulphate in an effort so to reduce to the point of temporary extinction, the vector snail population that the cycle of transmission of the disease would be effectively broken.

In these operations, 26¼ tons of copper sulphate were expended. An additional 6¼ tons of copper sulphate were issued to local authorities and groups of landowners who carried out the treatment of surface waters in their areas with the advice of the Regional health staff.

From studies which have been pursued during the year it is clear that infections of human beings with schistosomes, whose usual host is an animal, are much more common than was thought. Despite continual advice given by the Health Department, irrigation schemes are planned and developed without due consideration of the health aspects. There is absolutely no doubt that every irrigation area in the Colony will become infested with vector snails which will eventually become infected with bilharziasis unless the danger is realised at the outset, and plans for prevention made. The statement has been made before, and must be made again, that large scale irrigation schemes may well wreck the health of the country and bring the most grandiose schemes to a pitiful end. So many people see only the economic advantages of irrigation, and refuse to recognise the great disadvantages inherent in such schemes if adequate precautions are not taken *from the outset.*

The treatment of the sufferers of the disease has continued on a big scale. Soon after the introduction of lucanthone hydrochloride (Nilodin) (Miracil D hydrochloride) there were objections to the new drug on grounds of alleged toxicity and unpleasant taste. It is gradually being realised that this drug is in fact the most economical and most efficient method of treatment available, even for the treatment of infections with *Schistosoma mansoni.* Although many thousands of cases have

now been treated, no person has ever died as the result of the administration of lucanthone hydrochloride, and the side effects are really quite trivial. More and more patients, particularly children, are being treated as out-patients, even to the extent of receiving the tablets twice daily at their schools. During 1953, the Medical Stores issued 80·8 kilogrammes of tablets of lucanthone hydrochloride, enough material to treat 23,000 average cases.

(4) *Tuberculosis*

The numbers of cases notified continue to rise at a steep rate and the worsening situation in the African population since the end of the War is brought out in the following table of the reported cases of pulmonary tuberculosis.

Year	Europeans			Africans		
	Cases	Deaths	Cases per 100,000	Cases	Deaths	Cases per 100,000
1945	37	4	46·0	299	70	18·6
1946	36	3	43·1	323	89	19·1
1947	18	2	20·1	255	55	14·4
1948	42	16	40·8	370	76	19·8
1949	26	2	22·4	432	82	22·8
1950	36	4	27·9	704	150	36·0
1951	23	1	16·7	724	205	36·0
1952	28	3	18·4	959	181	46·3
1953	35	4	22·1	1,282	164	61·3

The rates in the European population show considerable variations due no doubt to the smallness of the group at risk. The reported deaths from the disease in Africans do not reflect the true position because many cases return to their homes in the Native Reserves where their deaths from pulmonary tuberculosis may not be notified. The reported case incidence rate in Africans is even higher in some areas; for example, in the Midlands Region, which is the important mining area, the rates per 100,000 of the population were 62·0 in 1951, 101·1 in 1952 and 141·3 in 1953. On further analysis of the notifications in this Region it is found that the Hartley District had 232 notified new cases of pulmonary tuberculosis in an African population of 77,000. At Gwelo an effort was made to follow up the fate of a number of patients six months after their discharge from hospital. Of 28 persons who could be traced, 6 had died, 4 were deteriorating, 4 showed no change and were not fit to work and 14 were improved and at work.

A considerable amount of tuberculin testing and BCG vaccination was carried on through the year. In some centres this was restricted to the testing and protection of hospital staffs, and particularly student nursing orderlies. At Salisbury some work was done in BCG vaccinations of African babies who would be living in unfavourable and overcrowded urban environment.

In the Midlands Region a comparative survey of populations on mines, in urban and in rural areas was done. At all ages the proportion of positive reactors was highest in mines, next in urban areas and least in rural areas. There seems to be little difference in the rate of conversion by sexes. In this region 6,205 persons were Mantoux tested, of whom 5,016 (80·8 per cent.) were negative and were vaccinated. The short working time available between the time of receipt of the consignment of BCG from Copenhagen and the expiry date, limits to a great degree the possibility of extending tuberculin testing followed by BCG vaccination to populations in the more remote areas.

At the Chindamora T.B. Sanatorium a study has been made of the reactions of African cases of pulmonary tuberculosis to treatment. During 1953, 247 patients were treated at this institution of whom 124 were admitted during the year. There were 10 deaths. In the same period 79 patients were discharged with their disease arrested. At the end of 1953, of the 143 patients in hospital, 87 were bed cases, the remainder convalescent. Two groups of patients of 47 each were compared. The first was given treatment as follows:

Streptomycin . . . . . 1 gramme bi-weekly.
P.A.S. . . . . 12 grammes daily.
Isonicontinic acid hydrazide . 200 mgm. daily.

The treatment was continuous for six months.

The second group was given:

Streptomycin . . 1 gramme
P.A.S. . . . . 12 grammes } daily for 30 days with monthly intervals between
I.N.H. . . . . 300 mgm. } courses. Three courses of treatment given.

After six months of treatment in the first group 24 were recovering, and either discharged or convalescent, while there were 37 cases in this state in the second group. There were six deaths in the first group and none in the second. At the end of the six month treatment period 17 of the first group were still in bed all with sputum still positive for *Myco. tuberculosis.*

In the second group only 10 were still in bed and of these only 4 had positive sputa. There seems to be some evidence that it is better to give concentrated and adequate courses of treatment, especially of streptomycin, each course followed by a rest period, rather than to attempt continuous treatment. The concentrated course of treatment does seem to make the patient's sputum negative earlier and get the patient fit for discharge quicker. The second course would also seem to be the better for preventing the development of resistant organisms.

(5) *Smallpox*

The outbreak of smallpox which began in 1945 ended in February, 1953, when the last nine cases were reported in the Midlands. Later in the year two imported cases of variola minor from Northern Rhodesia were reported from Wankie but no secondary cases resulted. Southern Rhodesia is exposed to importation of smallpox across all its frontiers, particularly to the north and east, whence there are continual streams of migrant labour seeking work. In such conditions it is vital that the Colony keep its vaccination protection level as high as possible in order that when an imported case occurs no focus is established. All immigrants entering the Colony are vaccinated at the various "ports of entry". This does not however prevent incubating cases of the disease proceeding in motor transport far into the Colony seeking employment in the towns, mines or farms. In the 1937 Annual Report the natural history of smallpox in Southern Rhodesia was studied. From this it appeared that when the vaccination protection level of the population was allowed to drop to below 110 per 1,000 of the population, there was a danger that if smallpox was introduced it might become established in epidemic form and require strenuous measures to prevent its spread. The vaccination protection level is measured by taking the average of the number of vaccinations done for six years and expressing this as a rate per 1,000 of the mid-year population. For example the vaccination protection level for 1953 is obtained by adding the total vaccinations done in the years 1947 to 1952 inclusive, dividing by six and expressing this as a rate per 1,000 of the mid-year population of 1953. The figure for 1953 is 308 per 1,000, compared with 124 per 1,000 in 1945 when the present outbreak began. Vaccination campaigns during an epidemic period are recognized as being much less efficient than a planned programme of work designed to deal with the whole population on a systematic basis.

The reported cases and deaths in the 1946/53 epidemic phase are given below with the number of vaccinations performed.

Year	Cases	Deaths	Vaccinations	Vaccination Protection per 1,000
1945	33	—	572,781	124
1946	181	1	347,570	—
1947	685	117	587,633	
1948	1,823	428	1,002,861	
1949	861	60	613,851	—
1950	1,034	223	957,582	—
1951	1,270	106	711,432	315
1952	87	13	312,468	302
1953	11	—	624,739	308
Total, 1946-53	5,952	948	—	—

The 1945–53 epidemic must be considered as one of variola major as the case mortality rate was high. It is known that the case mortality rate in Matabeleland and the Midlands was even higher than in the outbreaks elsewhere in the Colony. The previous experience in case mortality is as follows:

Period	Cases	Deaths	Case Mortality Rate per cent.
1918-1922	1,532	287	18·47
1923-1937	1,885	16	0·85
1938-1945	2,463	13	0·53
1946-1953	5,952	948	15·93

Mass vaccination is now done, using exclusively a lanolinated calf lymph manufactured in Nyasaland. This in conjunction with "multiple pressure" vaccination technique ensures a satisfactory vaccination protection.

(6) *Leprosy*

Information regarding the patients under treatment in the two leprosaria is given in Table A of the Appendix. At the end of 1953 for the first time for very many years there were no non-African patients under treatment in these institutions. The admission and discharge figures of African patients for the past five years are of interest:

	1949	1950	1951	1952	1953
Admissions	314	330	367	330	295
Readmissions	101	104	118	119	102
Discharged cured or arrested	208	253	207	384	448
Deserted	52	71	66	38	94
Died	54	56	29	33	28

Admissions have not varied greatly but there has been a big improvement in cases discharged cured and arrested. The overcrowding has therefore been greatly eased. The success of the sulphones in treatment is already providing much encouragement to indigenous patients to come forward voluntarily for treatment, since cured and arrested cases return to their homes and, from the knowledge

they spread, other sufferers come in for treatment. In any case a high proportion of the cases come from neighbouring territories; at Ngomahuru, of 132 male admissions only 48 were Southern Rhodesians. In fact a number of alien cases are known to have come into the Colony ostensibly to seek work, but in fact to seek admission for treatment of leprosy.

All patients are now on DADPS therapy and making good progress. The present routine is one tablet (100 mgm.) daily six days a week for six weeks, and thereafter a maximum dose of two tablets daily, six days a week. Reactions are infrequent and of a mild nature. Ferrous sulphate is also given as a routine.

(7) *Trypanosomiasis*

Nine cases of human trypanosomiasis were seen and reported during the year. Only one of these cases is likely to have been infected outside the Colony, the infections of the remaining cases being referable to the tsetse-fly area in the Zambezi Valley in the Urungwe and Lomagundi Districts between the Kariba Gorge and the Portuguese border at Feira.

In June and July a survey was carried out of the scanty African population in the Western two-thirds of the area extending east to the Sapi River. A total of 1,852 persons were examined and blood smears taken, 1,589 of these were residing below the escarpment in the Valley, the remainder being persons living in tsetse-fly areas on the top of the escarpment. Two cases of trypanosomiasis were discovered by the survey, one a boy aged about 11 years who was in a comatose condition and in whom a heavy blood infection was discovered. The second case was an adult female in apparently good health. In the area of the Sipolilo Native District, opposite Feira, two blood surveys of the village populations were made by courtesy of a member of the Northern Rhodesia Medical Department and two cases of the disease were discovered and treated. The distribution of 8 cases infected in the Colony during 1953 are, in Chief Chapoto's area opposite Feira, 3; at the mouth of the Sapi River,1; on the Rekomitje River, 15 miles from the confluence with the Zambezi, 1; and 3 cases in the near neighbourhood of Chirundu where the Alfred Beit Bridge carries the main road over the Zambezi River into Northern Rhodesia. A focus of infection near Chirundu is of the utmost significance in view of the development of the route and the possibility of sugar cane growing being started to the east of Chirundu.

If steps are not taken to reduce man–tsetse-fly contacts to a minimum, further cases of this disease may occur. It is felt that a determined effort should be made to drive or shoot the game away from a corridor along the road and undertake scrub and bush clearing along the road itself. The agricultural development will require careful planning to ensure that the human population is kept concentrated and surrounded by big areas of land cleared for cane growing and thus speed up the removal of tsetse-fly and game. Despite the resurgence of tsetse-fly in the other "fly belts" in the Colony there has been no evidence of any human cases occurring, other than in the districts discussed above.

(8) *Amoebiasis*

This disease is not a notifiable disease in terms of the Public Health Act and it is difficult from hospital records to differentiate between amoebic and bacillary dysentery. Table F of the Appendix shows that over half of the European cases of dysentery recorded as admitted to Government hospitals, were treated at Gwelo, 159 cases out of a total of 325. There has also been a great increase in the number of African patients admitted to this Hospital with amoebiasis and amoebic dysentery. The disease shows no seasonal influence, the number of cases admitted each month varying from 9 to 17. During 1953, the Gwelo Hospital laboratory examined 1,694 specimens of stool from Europeans and trophozoites of *Entamoeba histolytica* were reported on 211 occasions.

There is an impression that the type of case seen is becoming more acute and the dysenteric symptoms more pronounced. Efforts to trace the sources of infection have so far failed. It is interesting to note that a large proportion of the cases are referable to the municipal area of Gwelo, where a modern sewage disposal plant has been installed within the last few years. There is little if any evidence of an increase in the number of cases of amoebiasis occurring in other centres of population nearby.

(1) *European Hospitals.*

The Filabusi Cottage Hospital was opened on 1st September, 1953, but has not yet shown that it satisfies a real need in this district, having been patronized by only 24 patients in four months. One of the great difficulties in siting medical institutions in this Colony is the speed with which changes in the local economic conditions take place. At the time, it was decided to build the cottage hospital, Filabusi was a prosperous village centre with gold and base mineral mines close by, apparently with a good future. While the hospital was being built, the gold mine markedly reduced operations, and the base mineral mining showed a sharp decline. It must be emphasized that small cottage hospitals are less economical to run than larger institutions, and that in planning and siting of such facilities, there must be some limit set on how uneconomic a hospital can be allowed to become. The public have by long habit, become accustomed to seek medical advice in the larger towns. If hospital admission is advised, this places an additional strain on an already overburdened main hospital. Yet many such patients would be equally well served in their local cottage hospital. There is thus the position of large hospitals admitting patients to accommodation already strained to the limit, while the local hospital has empty beds and nursing and medical services which can be easily used if the public were willing to do so. In previous reports, attempts have been made to assess and measure the factor of economic usage of hospitals. The best measure available, appears to be the average number of patients in hospital on each day during the year expressed as a percentage of the total number of beds available. It has been suggested that a percentage of 80, of beds occupied daily represents full working capacity, and that a usage of under 50 per cent. represents an over-provision of hospital beds for the locality.

On these assumptions, Salisbury is grossly overcrowded (87·3), Bulawayo is working to maximum capacity (79·3) and Que Que (72·0), Gwelo (69·5), Gwanda (55·0) and Sinoia (50·6) are within economic limits. All the other European General Hospitals in the Colony are under fifty per cent., ranging from Fort Victoria (49·2) down to Chipinga (26·5) and finally Filabusi (10·8).

The following figures illustrate the general position in European Hospitals:—

	1953	1943	1933
General hospital admissions	18,538	12,733	5,972
Admission rate per 1,000 of the population . . .	117·3	156·3	114·8
Average days in hospital each case	9·8	11·4	13·9
Average number of patients per hospital bed . .	24·8	21·7	15·2
Beds per 1,000 of the population	4·7	7·2	7·6

The general position in 1953 has improved on the previous year in that the admission rate and average number of patients per bed have been reduced, and the provision of beds per 1,000 of the population has improved.

(2) *District Nursing Service.*

There remain 15 District Nurses' Stations; on the opening of the Hospital at Filabusi, the post here was transferred to Triangle Ranch, in the south-eastern area of the Colony, where a district nurse should prove most useful to this isolated locality.

The work done can be summarized as follows:—

Number of homes visited	1,445
Number of home visits paid . . .	9,510
Visits by patients to nurse	2,651
Midwifery cases	37
Vaccinations	4,029
Number of African out-patients treated	7,438

This record shows little if any increase on the work done in previous years. The record of midwifery cases is particularly disappointing. The largest number of cases conducted by district nurses in a year was 44, five years ago. The District Nurse, Salisbury, conducted 15 confinements; none of the others did more than three cases, so that the average, excluding Salisbury, works out at just one confinement per nurse.

(3) *Coloured and Asiatic Hospitals.*

There has been considerable pressure exercised during the year, to provide hospital accommodation for these groups at some of the smaller centres. The difficulty is that the size of the communities to be served is so small that even the smallest possible ward provision would be quite uneconomic. The Princess Margaret Hospital in Salisbury should have been opened in 1953, but the building had to be requisitioned to accommodate the Interim Federal Administration. The hospital will receive patients early in 1954.

A total of 104 beds is available in hospitals in nine centres for the Coloured and Asiatic Communities, and only in Bulawayo do the average daily in-patients exceed half the number of beds available. Statistical details are given in Tables D to F of the Appendix.

(4) *Mental Disease.*

The patient population is now more stationary and the alarming and steady rise over the post-war years seems to have reached a peak. This has been possible because of an improvement in the numbers of patients fit for discharge. The number of voluntary patients seeking treatment fell during the year, 29 Europeans and seven Africans; 37 were discharged. There were 93 cases on probation and of these 54 were finally discharged and 41 returned from leave for further care and treatment.

Building has started on a new block for chronic European female patients, and when this accommodation is put into use, the position will be very much eased.

The farm which is operated with the assistance of suitable patients supplied over £3,000 of produce to the hospital and showed on its operations a small profit of £265.

Increasing calls are being made on the Medical Officers for their specialist advice on medico-legal and child psychiatry problems.

(5) *Native Hospitals*

The delay in the provision of ward accommodation for general patients on the new hospital sites at Salisbury and Bulawayo continues, but there is every hope that actual ward blocks will be commenced early in 1954.

The building of a 108 bedded hospital at Rusapi is progressing well.

It is inevitable that gross overcrowding of hospitals continues unabated as the following figures show:

	1953	1943	1933
Number of beds for which hospitals designed . .	1,471	922	576
Patients admitted	62,571	29,480	2,535
Average stay of patients in days	11·2	12·1	21·3
Daily average in-patient population	1,925·0	980·1	497·8

The overcrowding of accommodation is fairly general and, in fact, only Bulawayo hospital is in the happy position of not having all its beds filled for every day in the year. Que Que Hospital has 92 beds and a daily average in-patient population of 92·6. To be overcrowded to the extent of having twice as many patients as beds for which the hospital was designed is quite a usual situation. Fort Victoria exceeds all other hospitals in being overcrowded; with 34 beds, it has an average daily population of 99·5 patients. It is surprising therefore to be able to record that 2,500 more patients were admitted in 1953 than in the previous year, but this was only possible by increasing the turnover of patients as much as possible. The pressure on the African maternity hospitals at Salisbury and Bulawayo continues, and it is now necessary to insist that only abnormal cases can be admitted for confinement from outside the immediate service areas of the institutions. The time is fast approaching when these hospitals will have to devote themselves to abnormal cases and primipara only, with their work complemented by a modified domicillary service in the African townships.

(6) *Native Clinics*

The number of clinics in operation at the end of 1953 is reduced from those of the previous year. At Chipinga it has been decided to class the Native Clinic as a Hospital which means that the institution now has nursing supervision by the European staff of the Hospital. Two clinics have closed down, Lupani, which was an out-patient dispensary in temporary accommodation, and Chiduku, near Rusapi, where the work has been much reduced by other clinics more conveniently sited for the population. This clinic is rather unique in that it was established by an African with his own efforts and was eventually taken over by the Government with its founder remaining as the nursing orderly in charge. The number of clinics operating at the end of the year is 85, as no new institutions have been put into service. A good deal of work has, however, been devoted to improving the accommodation and sanitary facilities at a number of the older clinics and three have been completely rebuilt as standard clinics. Despite the reduction in the number of the institutions there has been an increase of 56 beds.

There has been a slight increase of 1,020 in total admissions, but as there were nearly 1,000 fewer admissions for venereal diseases, the actual increase for other diseases was nearly 2,000. There has been a decrease in the number of out-patients treated and out-patients' attendances recorded, which seems to indicate that the present native clinics are either operating to capacity or the available population are now satiated with medical services. The in-patient units, admittedly, show however an equivalent value of 4,576 beds filled every day of the year, so it would seem that the over-crowding limit is now operating to hold down admissions. The turnover of patients in native clinics is now more rapid than formerly. In 1952, venereal disease patients stayed on the average 18 days, now they stay for 16½ days and the duration of stay figure for all admissions has been reduced by from 14 to 12 days. At most clinics the medical officer visits once a week, so the improvement in turnover can be considered reasonably satisfactory. The details of work done in Government Native Clinics appears in Table B of the Appendix.

(7) *Medical Store*

During the year the volume of work showed an increase over that of previous years, although this increase was marked by a slight drop in the cash value of sales and a marked decrease in the number of issue vouchers handled. These results are due to a steady and, in some cases, a sharp drop in prices, and to the fact that requisitionists are co-operating in submitting fewer but larger requisitions. The value of sales to Departments other than Health dropped from 13 per cent. in 1952 to 8 per cent. in 1953. This is due to the fact that during 1952 purchases had to be confined to items essential to the functioning of the Health Department, and consequently the demands of other Departments for items such as laboratory equipment and chemicals could not be satisfied. With the reversion to a trading account basis it is now possible to increase the range of stocks held, and the position should return to normal during the forthcoming year. Purchases were drastically curtailed during the year to allow the increased holdings accumulated through the stockpiling programme to be reduced. This phase has now passed and the normal purchasing programme is being resumed so that stocks may be maintained at safety levels.

The following table shows the essential statistics over the past five years:

	1949	1950	1951	1952	1953
Value of Purchases (£) .	174,568	207,425	313,183	348,048	125,520
Value of Sales (£) . . .	139,371	176,950	195,306	267,350	255,141
Number of Issue Vouchers	13,142	13,730	13,333	13,716	11,480

A notable feature of the year was the interest taken by local metal workers in the manufacture of hospital furniture and equipment. Several tenders were awarded locally, and some very good articles have been received. Unfortunately some manufacturers do not realise the necessity for the neat and careful finishing of hospital equipment, but if attention is paid to details, there is no reason why a very large proportion of such equipment could not be made locally. Another feature of the year was the increased interest shown in the territory by overseas manufacturers of good standing, several of which have established direct representation in the Colony.

(8) *Orthopaedic Centre.*

The output of work by the Centre has been fully maintained and it is now possible to carry out all artificial limb work for Africans locally.

European new patients were 601 and Africans 123, raising the total of patients on the books to 4,880. The job orders for the year amounted to 1,040 including 28 articulated limbs, 106 peg type limbs, 175 leg appliances, 63 calipers, 50 spinal supports and 210 belts and corsets.

(9) *Missions.*

	1953	1943	1933
Number of aided Medical Missions	53	25	(a)
Total admissions	51,537	21,608	(a)
Out-patients treated	1,027,477	188,794	(a)

(a) Figures not available.

The mission medical work shows little change on last year but much has been done to improve the standard of hospital accommodation at missions, towards which the department contributes fifty per cent. from Government funds. This has resulted in an increase of 122 in the number of " approved " beds in mission hospitals, an increase of 13 per cent. in one year. Missions, unfortunately, have difficulty in recruiting medical officers to supervise their medical work, which seriously handicaps the completeness of the service available in more remote areas.

There is special provision in the legislation governing medical registration, permitting medica men holding foreign degrees to practice their profession from mission stations with certain restrictions on entering private general practice away from their headquarters. Eight of the 16 mission doctors are enabled to practice by virtue of these provisions.

In a number of medical mission stations, the professional attention available may not be o1 the highest standard but, nevertheless, these bodies provide an essential service in areas, and of a lower cost than the Government can attain.

An analysis of the various headings under which grants-in-aid were made to Missions during the financial year 1952-53 is as follows:—

	£
Doctors' salaries	9,382
European nurses' salaries	12,789
African nursing orderlies and nursing aids	2,136
Grants for equipped beds	8,488
Drugs (75% of the cost of approved drugs)	11,161
Equipment (50% of the cost of approved items)	1,472
Expenses of training nursing orderlies	1,977
Running costs	47,405
Capital grants for buildings . . .	4,947

(10) *Mining and Industrial Medical Services.*

An effort has been made in recent years to get medical officers engaged in mining and industrial undertakings, to give some account of the work they do. This aspect of medical services in Southern Rhodesia increases in importance year by year. If industrial and mining managements would pay heed to the medical advice given to them, it would go far to mitigate the ill-health and inefficiency which will otherwise arise in the " Industrial Revolution " now in progress.

It is unfortunately true, however, that many such organizations pay scant heed to the advice given to them by Government and local health authorities or even to the advice given to them by their own medical advisers. The emphasis and the money is devoted to pressing on the purele industrial and technical development under the mistaken impression that production is the soly objective. Housing for employees, sanitation, health and safety precautions in the undertaking take a low place, being left over " until production is in full swing". This never happens because production in full swing is only possible when the human element of the production is healthy and living in reasonable conditions. Too often, one reads the sad story of a big industrial or mining undertaking, putting hundreds of thousands of pounds into plant and development, getting off to a rather shaky start, finding there are no funds left for housing, sanitation and basic improvements in the working environment. Then the planners puzzle for years to come, why such and such a mine or plant does not start to repay the capital expenditure lavished on the technical and inanimate sides of

an enterprise, at the expense of essential expenditure needed to secure a healthy environment for the human beings who after all are the only means by which wealth can be won. The signs of the sickness are pathognomonic—a high turn-over rate of the employees, a high industrial accident rate due in part to this, and in part to the lack of a training programme; a high minor sickness rate, especially of excremental disease, and the ominous cloud of a rise in pulmonary tuberculosis, linked, no doubt, with the unsatisfactory housing.

The following figures, supplied by some of the Colony's mining and industrial undertakings, are quoted to give some idea of the magnitude of this work, but unfortunately, some large enterprises have not co-operated in this, so the information is very far from complete.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Europeans employed	388	120	385	98	*	12	76
Africans employed	6,080	2,366	1,872	1,056	1,020	300	1,016
Hospital beds—European . . .	16	—	—	—	—	—	—
African . . .	308	100	40	79	14	18	40
Admissions—Europeans . . .	396	—	—	—	—	—	—
Africans	5,134	3,723	1,366	1,113	906	*	722
Out-patient attendances—European	5,982	2,168	5,406	*	*	*	731
African .	19,148	1,410	4,980	7,552	*	*	2,884
Occupational accidents—European	35	11	410	26	*	*	29
African .	989	354	3,956	181	267	*	273

* Information not supplied.

(1) Shabanie Mine — Shabani asbestos.
(2) Gath's Mine, Mashaba — asbestos.
(3) Riscom Steel Works, Redcliff, Que Que.
(4) Globe and Phoenix Mine, Que Que — gold.
(5) Connemara Mine, Que Que — gold.
(6) Gaika Mine, Que Que — gold.
(7) Motapa Mine, near Inyati — gold.

(11) *African Medical Services.*

All medical treatment to Africans in this Colony by Government and local authorities is free of any direct charge to the patient. This also applies to most mines and mission hospitals, though this latter category sometimes asks patients to supply at least some part of their food. There is no doubt, however, that the African, like many other people, feels that any service which is free of charge cannot be good, and there is a growing tendency among the wealthier and more sophisticated Africans to consult private medical practitioners. For many years, consideration has been given to the possibility of levying charges in hospitals and clinics. While this might be feasible at Native hospitals, it is not possible at Native Clinics if rigid financial regulations have to be followed. If it were possible to devise some simple system whereby Africans could be asked to pay when they were able to do so, and have an arrangement of small or single wards in hospitals, where the better class African could pay for a better type of accommodation, the excellent medical service given in Government institutions might be better and more gratefully appreciated.

The following details give an overall, if incomplete, picture of the in-patient treatment of African patients in Southern Rhodesia.

Type of Hospital	Beds Available, 1953	Admissions		
		1953	1943	1933
Native hospitals (16)	1,471	61,170	33,285	8,535
Mental hospital (1)	580	443	178	358
Leprosy hospitals (2)	1,719	295	228	286
Maternity hospitals (2)	121	6,658	—	—
Tuberculosis hospital (1)	150	124	—	—
Government Native Clinics (87) . . .	3,966	137,824	43,548	4,522
Medical Missions (53)	1,267	51,537	21,608	*
Local authority hospitals (6)	378	7,914	*	*
Mine hospitals (7)	599	12,964	*	*
TOTAL (175)	10,251	278,929	98,847	13,701
Rate per 1,000 Africans . .	4·9	133·5	66·1	12·2

* Information not available.

(12) *Extracts from District Reports*

The following short extracts culled from the reports submitted by Government Medical Officers will serve to illustrate the variety and interest of their work, often carried on under difficult and trying conditions.

Government Medical Officer, Chipinga. "One case deserves mention for courage if for nothing else. An African male juvenile was stabbed in the belly and, after thinking things over for a day, decided to walk to the clinic. He walked alone for 22 miles before being picked up by a passing lorry. With the help of a member of the European staff of the adjoining hotel a triple resection and anastomosis of three incised and gangrenous loops of gut was done and the patient recovered, all thanks due to the antibiotics." Another instance of African fortitude: "A four-weeks old baby had one leg burnt off at mid thigh and the other leg badly burnt. The baby was perfectly happy and gaining weight three months and many skin grafts later. In the five and a half years I have worked in Chipinga the adoption of Western medicine by the African has been amazing. It is now commonplace for aged Africans from as far afield as Mahenya's (140 miles from Chipinga) to ask for X-rays."

Government Medical Officer, Concession. "No cases of blackwater fever have been seen. My memory of this disease is getting fainter and fainter and I trust this will continue. I have seen 55 cases since I came here, but it must be eight years since the last one." Discussing pulmonary tuberculosis he remarks: "The systematic improvement after iso-nicotinic acid hydrazide is so marked that I can persuade patients to remain. One would expect the opposite with the African, who generally considers he should leave once he starts to feel better. I can persuade them now that if one course does so much good, that two or more courses will do the same amount more good. The African does now understand that the disease is infectious and insists that his family all be examined. In this way early cases have been detected."

Senior Government Medical Officer, Gatooma. In this centre of a mining district, pulmonary tuberculosis is a great anxiety. The cases are treated initially in the hospital and then transferred for further treatment in an annexe to the hospital previously used for the treatment of venereal disease. "Among the male patients there is little tendency to abscond, though females are still inclined to leave as soon as they feel better. On a course of streptomycin twice weekly, supported by daily P.A.S. and iso-nicotinic acid hydrazide, many of the patients feel better within a week, and are sputum negative within a month. There is little evidence of drug resistance and the few cases which have relapsed after discharge respond as rapidly to further courses as they did to the initial treatment. Most of the pulmonary lesions are widespread and do not lend themselves to surgical procedures. There have been several patients with very big cavities which have closed after three to six months of chemo-therapy alone."

"Amoebiasis appears to be becoming more common. There is often no history of diarrhoea, but liver tenderness can be elicited by squeezing the chest on the right side between hands placed front and back on the chest."

Government Medical Officer, Gwanda. "Investigation of the chronic chest case has become one of the most time-consuming but interesting of my duties. Mining histories as detailed as possible are taken from each case. So far, out of sixty mine workers who have been working underground in gold mines in this district, and who have been X-rayed, six have shown silicotic mottling and a further six show the grosser conglomerate lesions of the third stage; that is, one-fifth of the workers examined show evidence of advanced silicosis."

Government Medical Officer, Karoi. "No cases of blackwater fever or cerebral malaria were seen and, despite the heavy rains, the incidence of malaria was even less than previous seasons. This is no doubt due in part to the propaganda put out on spraying, screening and chemical prophylaxis." "A bilharziasis survey on the African patients admitted, showed 298 cases of *S. haemotobium* and 90 cases of *S. mansoni* in 1,168 cases."

The proportions in patients from the four Central African territories is interesting. The Southern Rhodesian cases include women and children and there were 285 infections in 759 patients, 37·5 per cent. The patients from the other three territories were almost exclusively adult male Africans in employment, and the infections and rates were as follows: Northern Rhodesia, 26 infections in 189 patients, 13·8 per cent.; Nyasaland, 55 infections in 100 patients, 55 per cent., and Portuguese East Africa, 22 infections in 120 patients, 18·4 per cent."

Government Medical Officer, Melsetter. "During the year there were two European deaths, both old-age pensioners; one aged 80 years from chronic nephritis, the other aged 72 years from cancer of the jaw. There were two cases of notifiable disease, one of smallpox, the other of chickenpox, both Africans."

The Government Medical Officer, Mtoko. "A fair number of blood transfusions were given during the year. This is quite a procedure at an out-station. The patient has to be grouped. The ambulance brings in a batch of relatives who all have to be grouped and cross-matched. Blood is withdrawn from the donors, the patient is transfused and then the operation is performed. To do this virtually single-handed is quite a performance, and all the time the patient's life may hang in the balance. One case worth noting was a patient suffering from a Placenta praevia, bleeding profusely with a haemoglobin down to 20 per cent., who survived a Caesarean section after a transfusion of five pints of blood."

Senior Government Medical Officer, Ndanga, discusses the care of the chronic sick and the destitute: "Such cases are not infrequent, but it is hardly the function of native hospitals and clinics to treat or care for such cases indefinitely. As an instance, cripples, usually the result of repeated burns sustained during epileptic fits, are not an uncommon sight, while individuals who have for one reason or another no means of subsistence are, I think, more common than is generally recognised."

Government Medical Officer, Nyamandhlovu. "The rural health committee continues to function with great local support, and this undoubtedly is reflected in the almost complete absence of malaria in Europeans and Africans."

The Senior Government Medical Officer, Que Que. " At the Junior School hostel, I noticed a few children who looked undernourished and sickly at the beginning of the term. They were treated for chronic malaria and with regular feeding and adequate rest and sleep, they improved considerably through the term. It is my contention, that lack of sleep, due to any cause, chronic illness, poor housing conditions, heat, flies and other insects, and even the parents; is responsible for more injury to growth in these young children than the immediate lack of a balanced diet." He quotes the following case: " A European girl aged nine years, complaining of headaches and general malaise. Had been running a daily temperature for two months. She had been ill, on and off, for over two years. She had been treated on a number of occasions for chronic malaria. As

each new antibiotic appeared, she was given a course of treatment. What struck me, was a little dry cough and occasional fleeting joint pains. I did a cercerial antigen skin test which showed positive. She was given Miracil D over three days, the temperature settled immediately, cough and joint pains disappeared, and she regained her appetite. During the next four months she lost 15 lb. in weight, and from a fat, flabby, ungainly child of a rather peculiar mentality, she has become a normal, healthy child."

Government Medical Officer, Rusape. " I have not seen a single case of malaria in a European this year. There has been an epidemic of what appears to be Bornholm Disease (epidemic myalgia). The youngest case was two months old, the oldest sixty-five years. At first, the epidemic was amongst Europeans, but is now developing in the African population. Three cases of what appeared to be aseptic meningitis have also been seen. They showed intense headache, neck rigidity, vomiting and photophobia. Two of the cases had a troublesome retention of urine. One case who was lumbar punctured, showed a moderate increase in cells and protein. Two of the cases had been in contact with children suffering from Bornholm disease."

Senior Government Medical Officer, Salisbury. " It is possible to divide the Hospital admissions into two groups—those who are in need of medical or surgical treatment and whose condition is such that they can be cured or benefited by it, and those who seek admission because their home conditions do not allow of their obtaining any sort of nursing attention or feeding there. The reasons for this are obvious—a large proportion of the younger, unmarried population group live in single rooms, and take their meals as table boarders in restaurants or boarding-houses. When they fall ill, they have no one to whom they can look for assistance. In the case of married people living in their own homes, the high cost of those same homes has made it necessary, in a high proportion of cases, for the wife to go out to work to maintain the family income. When illness, even of a temporary nature, confines either husband, wife or child to their bed, there is great reluctance on the part of the remaining member to remain at home and care for the incapacitated one, lest by doing so he or she might lose their job. Hospital admission is therefore demanded for such a case where it could not be held that the medical condition necessitated it.

" A further large group, for whom admission to Hospital is sought, are the elderly and infirm. Many of these unfortunate people recognize only too well that they do not really require Hospital care and are humiliated to have to seek it. They are however, left with no option in the circumstances at present prevailing in Salisbury."

Senior Government Medical Officer, Umtali. " A fatal case of porphyria in a European is described: A male, aged 33 years, was admitted with indefinite abdominal pain and dysuria. Progressive weakness, with marked neurological signs followed with associated emotional and psychological disturbances. The typical dark port wine urine was not evident until late in the disease. Post-mortem examination showed no organic disease which could explain the clinical picture, which is in keeping with reports of other cases described in the literature."

Government Medical Officer, Umvukwes. " The clinical picture of malaria in the African is changing. Most farm labourers now receive some anti-malaria drug if they are ill, from any disease whatsoever, and when it is malaria, receive any inadequate dose. On being seen at the clinic with indeterminate symptoms and negative blood slides, they are given empirical heavy doses of anti-malarials and soon clear up."

Government Medical Officer, Umvuma. " Major operations totalling 166 were done at this clinic, not counting maternity cases which included 21 deliveries by Caesarean Section. The policy of 'double plating' immediately, all possible fractures of the limbs, has been continued, and the results appear to justify the operation. Simple fractured tibias, for instance, generally return to work with full function, free of plaster or any other encumbrance within a month. 277 General anaesthetics were given during the year, almost all by the head nursing orderly. One death on the table occurred in a patient with a 4-day strangulation of the bowel, involving a length of 7 feet of gut. As anaesthetists, these orderlies are very competent and some tricky anaesthetics, in seriously ill patients, have been given with success."

Chapter IV.—PREVENTIVE SERVICES

(1) *Laboratories.*

The reports of the laboratories are reproduced as Appendices L, M, N and O. The number of investigations undertaken at the routine laboratories were as follows:—

	1953	1943	1933
Public Health Laboratory, Salisbury	110,802	55,587	16,687
Hospital Laboratory, Umtali	24,073	—	—
Public Health Laboratory, Bulawayo	101,298	34,576	2,035
Hospital Laboratory, Gwelo	13,763	—	—
Government Analyst's Laboratory	2,504	1,161	451
	252,440	91,324	19,173

There have been requests for the provision of additional hospital laboratories at some of the large district hospitals. As more technicians are trained in the two main laboratories, it is hoped to proceed with the provision of hospital laboratories which would deal with all the parasitological and some of the bacteriological investigations at these centres. For a number of years, it has been the policy of the Department to give to selected African nursing orderlies, a four months' course in microscopy, fitting them to carry out the simpler laboratory procedures. The number so trained, amounts to fifteen per annum, and they are then posted to hospitals and clinics. All hospitals and 24 of the clinics are now staffed with Native microscopists, increasing to a great extent, the local facilities for the clinical investigation of patients. It is, however, very important that medical officers themselves should have a good working knowledge of the subject, and be able to check and confirm the reports of their African microscopists.

(2) *Schools Medical Service.*

A summary of the findings at routine examinations of European, Coloured and Asiatic Schools is given in Tables I and J of the Appendix.

The only African schools which were medically inspected are in the Northern Region, and as the total number of children examined amounted to 903 only, Appendix K has not been reproduced. The routine medical examination of this group was combined with a urine survey for bilharziasis and it was shown that nearly half the children attending these Government Urban Schools for Africans were infected with the disease. The nutritional standard was found to be high and only 39 of the total examined, 4·3 per cent., were assessed as unsatisfactory.

1953 is the first year of operation of the new system of conducting the schools medical service as an integral part of the regional health service. An effort has been made to devote more time and energy to the follow up of children who have been found to have defects, and to get these remedied as soon as possible. It seems more important in a school health service operating over such great distances, and with widely scattered schools, to give priority to the following up of children found to require attention, rather than to devote the time to routine examinations of all the children at schools at a larger number of stages in their school career.

The following summary of the work done by Regions is given:—

	Northern	Western	Midlands	Eastern	Total
Number of European schools open to inspection	—	—	—	—	138
Enrolment of above schools, second term, 1953	—	—	—	—	31,072
Number of European schools inspected	37	40	29	7	113
Enrolment of schools inspected	7,704	9,829	5,329	788	23,650
Routine S.M.I. conducted	4,672	1,134	3,423	399	9,628
Short routine and special examinations	613	3,325	207	278	4,423
Number of Coloured and Asiatic schools open to inspection	—	—	—	—	18
Enrolment of above schools, second term, 1953	—	—	—	—	3,499
Number of Coloured and Asiatic schools inspected	5	6	6	2	19
Enrolment of schools inspected	1,266	1,505	569	161	3,501
Routine S.M.I. conducted	381	432	317	75	1,205
Short routine and special examinations	608	308	79	86	1,081
Intelligence testing by Schools Medical Officers	239	36	13	99	387
Children requiring to be vaccinated	271	232	35	26	564

During the year, the Department of Education appointed an Educational Psychologist. His headquarters are at Bulawayo in the Western Region, and he relieves the Medical Officers of much of the intelligence testing work. Medical Officers will, however, still be responsible for this work in those cases where children are considered to be ineducable, and their exclusion from ordinary school education may be advised.

(3) *Government Dental Service.*

A dental surgeon has been maintained at Gwelo during the year so it was possible to give a better service to the Midlands Region.

(a) Schools

	Mashonaland and Manicaland	*Midlands*	*Matabeleland*
Children examined	10,765	2,498	8,555
Children treated	1,178	479	680
Fillings—			
Temporary teeth	661	342	422
Permanent teeth	2,226	1,106	570
Extractions—			
Temporary teeth	1,017	266	613
Permanent teeth	266	110	126
Orthodontic treatment	10	—	—
Other operations	17	4	2
Scaling and cleaning	97	4	—

(*b*) Uniformed Services

	Mashonaland and Manicaland			*Midlands*			*Matabeleland*		
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
Extractions	121	116	25	26	1	2	97	9	—
Fillings	363	159	5	155	10	—	139	21	5
Dentures supplied	21	19	5	5	—	—	15	1	4
Dentures repaired	17	22	4	2	—	—	3	1	—
Other operations	375	190	7	55	5	5	239	28	14

(1) B.S.A. Police. (2) Permanent Staff Corps. (3) Prison Service.

(*c*) Indigent Europeans and Africans

	Mashonaland and Manicaland	*Midlands*	*Matabeleland*
Extractions	7,291	857	2,038
Fillings	52	—	78
Dentures supplied	91	2	27
Dentures repaired	29	1	20
Other operations	124	9	161

(4) *Health of the B.S.A. Police.*

	Europeans	*Africans*
Total strength	1,065	2,327
Number reporting sick	1,340	2,073
Average days lost per case	8·6	7·3
Cases of venereal disease	—	31
Discharged medically unfit	5	8
Deaths	2	1

The policy of residual spraying of all living quarters in police camps has been continued, and there is a further reduction of cases of malaria in European members. It is inevitable, however, that in a body of men whose duties require them to visit unhealthy areas in all weathers, a great deal depends on the personal anti-malaria measures observed. One European member contracted black-water fever, the last such case occurring in 1935.

In the table above " light duty " is counted as half a day lost. Injuries and accidents contribute largely to the sickness total, and by the nature of their duties, members of this Force are exposed to a greater than normal risk. During 1953, for example, one of the deaths was due to multiple injuries in a car accident, and one member was on light duty throughout the whole of 1953 as a result of a severe fracture of the leg.

(5) *Military Medical Services.*

The Permanent Staff Corps now has two medical officers on its strength who devote their whole time to the service of the Corps, including its military formations, such as the Southern Rhodesia Air Force and the Rhodesian African Rifles and the care of the dependants of officers and men The duties are divided by having one medical officer stationed at the K.G. VI Barracks, the other at the new Salisbury Airport, both at Salisbury. The medical care of members and dependants at other centres is still done by civilian Government Medical Officers.

A total of 395 cases reporting sick were excused all duty for 2,487 days and 2,751 days of light duty.

Medical attention at Territorial Camps is given by the Military Medical Officers, Territorial Force Officers and Medical Officers who are performing their compulsory military service. The organization of a Southern Rhodesia Medical Corps is proceeding slowly and regular training programmes of the cadres for medical formations is now under weigh.

(6) *Central Government Health Services.*

Preventive health services are organized on a regional basis: Western Region, with headquarters at Bulawayo; Midlands and South-eastern, at present administered as one region, from Gwelo; Northern, based on Salisbury, and Eastern on Umtali.

The Medical Officers and health inspectors have a very extensive field to cover, and it is most important that routine duties inherited from the past which do not fulfil an urgent health need should be given critical scrutiny and energies of the small staff devoted to the more important problems. The following list deals with some of their important functions:

(*a*) supervise the work of the health inspectors;

(*b*) organize the schools medical inspections and the health work in schools and advise on the environmental hygiene of the institutions;

(*c*) deal with the control of epidemic disease, including routine smallpox vaccination and other prophylactic inoculations;

(*d*) advise the smaller local authorities who have no full-time medical officer of health or health inspector, on their health and environmental hygiene problems;

(*e*) advise the Government Medical Officers, whose districts are in the Region, on health matters;

(*f*) assist the Native Affairs Department in the problems in hygiene in Native Reserves and especially in those brought about by the resettlement of African communities in accordance with the provisions of the Land Apportionment Act;

(*g*) encourage communities of all types to undertake residual insecticide spraying in the control of malaria;

(*h*) advise other Government departments, including Police, Education and Irrigation in health matters arising from their functions and services;

(*i*) arrange the inspection of hotels for the Liquor Act and the inspection of all new trading premises and stores, including butcheries and bakeries; and do these also when such trading premises change ownership;

(*j*) take every opportunity of imparting health education to the public and especially to those members, including teachers and youth leaders, who are able in turn to pass the knowledge on to others, and

(*k*) undertake any special investigations or surveys that might be of value to the health of the Region, for example, such subjects as tuberculin surveys linked with BCG vaccination, bilharziasis surveys and studies of industrial hazards.

The following is a summary of the work done by the Government Health Inspectors during 1953:

Vaccinations	456,174
Diphtheria prophylaxis	59,936
Inspections of licensed hotels	578
Investigations of infectious disease	1,200
Routine inspection of premises	10,101
Other duties (including sampling)	3,218
Prosecutions undertaken	192
Number of health inspectors	23
Total mileage performed	242,101

(7) *Local Government Health Services.*

During the year Fort Victoria, which is the oldest community in Southern Rhodesia, became a municipality. Mabelreign, adjacent to Salisbury, was created a Town Management Board Area, but as no health staff is employed by any such Board all work and advice on health matters within these areas is given by members of the Health Department.

The health staff employed by Municipalities is as follows:

	Medical Officers		*Health*	*Health*
	Full-time	*Part-time*	*Inspectors*	*Visitors*
Salisbury	4	—	11	5
Bulawayo	2	—	11	3
Fort Victoria	—	1	1	—
Gatooma	—	1	1	—
Gwelo	—	1	3	—
Que Que	—	1	1	—
Umtali	—	1	1	—

In addition, the larger authorities employ trained nursing staff in their infectious diseases hospitals, cleansing and abattoir superintendents and male nurses engaged in hospitals and on the medical examination of Africans in employment.

The following figures will convey some idea of the magnitude of the health work done, particularly by the larger local authorities. Salisbury and Bulawayo are now modern cities with all the problems raised by expanding secondary industry, multi-storied buildings, a great increase in flat dwellings, the burden of increased sewage and the housing and rehousing of large African populations.

Figures are available for only five of the seven towns:—

	Salisbury	Bulawayo	Gatooma	Gwelo	Umtali
Estimated population—					
European	32,000	34,000	1,800	5,560	6,750
Coloured and Asiatic	2,800	2,700	250	374	300
African	82,437	95,000	9,800	15,515	20,00 0
Admissions—					
European I.D. Hospital	188	562	*	78	*
Native I.D. Hospital	1,850	901	640	*	587
Native V.D. Hospital	1,794	1,380	245	*	517
Attendances — Native V.D. Clinic	9,270	23,465	*	†	9,763
New cases, syphilis in Africans	893	2,191	203	1,134	373
New cases, gonorrhoea in Africans	1,319	1,044	42	646	507
Medical examination of Africans in employment	201,663	53,325	23,092	3,075	19,570
Cases at ante-natal and C.W. Clinics (all races)	41,806	16,207	*	*	†
Diphtheria immunizations	1,536	4,193	40	†	†
Vaccinations	79,420	58,472	14,289	2,583	2,608
Visits by health visitors	6,958	8,110	*	*	*
Inspections by health inspectors	40,536	22,682	†	†	†

* No facilities. † Figures not available.

(8) *Nutrition Services.*

Investigations of the nutritional pattern of African diets in the Colony have been continued. Efforts have been directed towards trying to improve the value of the predominant item in the diet, maize, as it is actually eaten.

There is a strong local prejudice to yellow maize in Southern Rhodesia. In the preparation of Mexican tortilla and tamale (maize dumplings) it is unfortunate that the pre-soaking of the kernels in lime water results in a yellow dough.

Tempe (a food made from fermented soya bean) is now in commercial production and has been generally well received by Africans. It is hoped that production and marketing of this product on an increasing scale will follow.

Another line of approach to the improvement of the African dietary has been study of the means of fortification of maize meal by the addition of calcium, riboflavin and nicotinic acid. It has been estimated that the additional cost of these ingredients and their mixing in the maize meal amounts to 1s. to 1s. 2d. per 200 lb. bag. A population consuming as its staple diet a fortified maize meal would not suffer from pellagra and ariboflavinosis. If some of the larger purchasers of maize meal for rations, such as the Government, Railways, and the larger municipalities and mines would agree to buy fortified meal there is little doubt the habit would spread and in due course fortified meal would be generally used.

For very many years it has been known that endemic goitre occurs in certain parts of the Colony. The African population makes use of a coarse unrefined salt for domestic use which is not suitable for admixing iodine salts.

The extra cost of a refined iodised salt would preclude its general use, especially as most of the endemic areas are rather remote and primitive.

If the price of iodised salt was subsidised so that it could be sold at the wholesale price, there is no doubt it would soon be used widely. What is not clear at the moment is whether the problem of endemic goitre is of sufficient importance to warrant such a heavy expenditure.

Reference has been made in previous years to the changing African diet and the adoption of a number of European items, generally those which the African could well do without. Until recently it was customary for Africans in employment to receive rations from their employer as part of their remuneration. Now the tendency is to give the employee cash in lieu of food, which he can spend as he likes.

The consumption of bread, tea and mineral waters has soared to the detriment of the diet. These habits are spreading to the Native Reserves and these items now figure largely in the diet of the women and growing children. In one Reserve not far from Salisbury, two small trading stores showed the following weekly sales:

White Bread	150 dozen loaves
Buns	1,000 dozen
Sugar	30 by 100 lb. bags
Condensed Milk	50 dozen tins
Meat	2,500 lb.

Other foods sold included biscuits, tea, coffee and, of course, the inevitable Coca-cola.

These figures demonstrate a trend in Native Reserves towards imported and processed foods in place of the traditional maize porridge and relish. The cost of these imported foods is much higher than their low nutritive value merits, so that the trend is detrimental. Although the traditional food patterns need much improvement, this could be done by better methods of processing and using locally grown foods rather than creating a market for imported foods of high cost.

(9) *Aviation Health.*

Despite the institution of the International Sanitary Regulations, travellers continue to arrive in this Colony not in possession of valid yellow fever inoculation certificates. At times the accommodation in special mosquito-proofed quarters of travellers awaiting the expiration of the quarantine period, has been seriously strained. During the year, the Public Health Act was amended to give legal status to the International Sanitary Regulations and permit the introduction of suitable subsidiary legislation to control air traffic and traffic by road and rail across the land frontiers of the Colony. There are four centres in the Colony which are recognized for the issue of international certificates of vaccination against yellow fever, and 3,938 such certificates were issued during 1953.

Civilian air pilots are examined for "B" licences by specially trained and equipped medical officers at Salisbury and Bulawayo, and 163 were examined during the year.

Chapter V.—Administrative and Miscellaneous

(1) Staff (Establishment).

1. *Medical Officers*:	
At Headquarters.—Secretary for Health, 1; Director of Curative Services, 1; Director of Preventive Services, 1	3
In Districts.—Medical Superintendents, 7; Government Medical Officers, 52; Aided Government Medical Officers, 9; Regional Medical Officers of Health, 4; Medical Officers of Health, 6	78
Specialists.—Directors of Laboratories, 2; Pathologist, 1; Superintendents and Assistant Superintendents, Mental, Leprosy and Tuberculosis Institutions, 6; Radiologists, 4; Ophthalmologists, 1	14
Junior Resident Medical Officers and Senior House Surgeons	17
	112
2. *Dental Surgeons*	6
3. *Analytical Chemists*, 5; Food Technologist, 1	6
4. *Pharmaceutical Chemists*—	
At Headquarters	3
Medical Store	6
At Hospitals, including Relief Staff (Hospital Secretaries, 19; Dispensers, 5)	24
	33
5. *Health Inspectors*	23
6. *Laboratory Professional and Technical Assistants*	27
7. *Research Laboratory Staff* (Professional Officers, 3; Technical Assistants, 4; Medical Entomologists, 1; Anti-Malaria Officers, 8)	16
8. *Nursing Staff* (Staff Matron, 1; Senior Matrons, 2; Matrons, 28; Sister Tutors, 6; Sisters, 73; Qualified Nurses, General, 290; District Nurses, 19; Student Nurses, 192; Schools Nurses, 2; Male Nurse, Ndanga, 1. Mental Branch: Males—Head Male Attendants and Charge Male Nurses, 6; Qualified Nurses, 22; Females—Senior Matron, 1; Matrons, 2; Sisters, 3; Qualified Nurses, 19)	667
9. *Orthopaedic Technicians*	2
10. *Radiographers, including Learners*	25
11. *Masseuses*	7
12. *Dietitians*	4
13. *Occupational Therapists*	2
14. *Clerical Staff* (men, 49; women, 92)	141
15. *Other European Staff*	73
Total European Establishment	1,144
Non-European Staff	2,246

(2) *Nursing Service.*

The staff position generally is much improved, and at long last, recruitment of nurses is outstripping the number of resignations from the Service. The situation is now developing, where lack of accommodation for living-in staff will be the limiting factor, not the lack of recruits. There were 105 recruits to the permanent general nursing staff during 1953 and 83 left the service. There are now 299 nurses on the permanent staff, which is just what it was in 1949. The numbers of recruits and losses in the years between, have been as follows:—1949, 112 and 71; 1950, 78 and 87; 1951, 94 and 66 and in 1952, 76 and 75. It is interesting to note that of the 83 nurses who left the Service during 1953, only one, a Matron, retired on pension. Most of the remainder, although their services were lost to the Government Nursing Service, remain as a valuable asset in the Colony, 57 having resigned for the purpose of marriage. A number of these nurses rejoin the Service on the " temporary " staff after marriage. Many of these are prepared to live out and this helps to reduce the demand on accommodation in Nurses' homes. On the other hand, being temporary officers, they cannot be transferred readily from one hospital to another, and so the flexibility of the service is reduced. The " temporary " general nursing staff totalled 64 at the end of the year, 72 joining, 64 resigning and four were transferred, two to the permanent staff and two became District Nurses.

There are now increased opportunities of employment for Coloured and African trained Nurses, the difficulty here being mainly one of lack of suitable living accommodation. Apart from the posts on establishment for African nurses, a small number of vacant posts for European nurses are filled at present by fully qualified African nurses, who are doing excellent work in the African hospitals.

Recruits for training as Nurses at the Salisbury and Bulawayo Hospitals are offering in fairly good numbers, and applications are received from as far afield as East Africa. At the end of 1953, there were 162 student nurses in training, the new intake for the year being 57. In the same period, 60 left, of whom only 21 had passed the State Final Examination. Most of the newly qualified nurses proceed outside the Colony to obtain the Midwifery qualification, training for which cannot as yet

be obtained in Southern Rhodesia. In fact only one newly qualified nurse joined the Service immediately after completion of training. The Preliminary Training School has been in operation at Salisbury throughout the year, and has proved its value in that it permits of easier introduction of the student nurses to their arduous duties, and allows those who find the work uncongenial to resign before wasting much of their time on a career which no longer attracts.

The year 1953, saw a further step forward in the opening of a Nurses' training school for Coloured Student Nurses in Salisbury. Whilst very considerable difficulties have been encountered in finding accommodation for these girls, and to a lesser extent, in finding suitable recruits, it is pleasing to record that the first intake of five students have put up with these difficulties, and have co-operated well in the scheme. Lectures and demonstrations in the Preliminary Training School were in common with the European Students, who had themselves asked that this arrangement be made.

The staffing of the Mental and Nervous Disorders Hospitals continues to present a serious problem, particularly on the female side, where only one-third of the staff are on the permanent establishment.

A comparison of establishments and the actual numbers employed at the end of 1952 and 1953, gives a general picture of the nursing staff situation.

Rank	Establishment, 1952/53	Number Employed, 31.12.52	Establishment, 1953/54	Number Employed, 31.12.53
General Branch—				
Senior matrons	2	2	2	2
Matrons	27	25	28	26
Sister tutors	6	5	6	6
Sisters	73	65	72	65
Qualified nurses	282	242	290	265
Religious Order sister	1	1	1	1
Religious Order qualified nurses	6	6	6	6
Coloured qualified nurses	—	3	4	3
African qualified nurses	18	21	18	26
Mental Branch—				
Senior matron	1	1	1	1
Matrons	2	2	2	2
Sisters	3	3	3	2
Female qualified nurses	18	14	19	18
Male charge nurses	6	6	6	6
Male qualified nurses	22	22	22	21
Others—				
District nurses	19	15	19	17
Schools nurses	2	2	2	2
Male nurse	1	1	1	1
TOTAL QUALIFIED STAFF	489	436	502	470
Student Nurses—				
European	192	164	192	162
Coloured	—	—	20	5
TOTAL	681	600	714	637

(3) *Medical Council of Southern Rhodesia.*

The numbers on the Registers of the Council at the end of 1953 are as follows, not all necessarily residing and practising in Southern Rhodesia:—

	Additions	*Total*
Medical Practitioners	39	513
Medical Practitioners (temporary registrations)	10	10
Medical Practitioners (provisional registrations)	13	13
Dental Surgeons	6	95
Dental Surgeon (temporary registration)	1	1
Chemists and Druggists	29	226
Chemists and Druggists (temporary registrations)	2	2
Opticians	10	24
Optician (temporary registration)	1	1
Trained Nurses—General	219	1,519
Fever	19	19
Mental	12	71
Midwives	129	803
Maternity Nurses	8	8
Masseurs and Masseuses	—	30
Radiographers	—	7
Medical Laboratory Technicians	—	4
Sanitary (Health) Inspectors	5	79
Meat and Other Food Inspectors	11	74
Native Nursing Orderlies	52	326
Native Health Demonstrators	10	44

(4) *Training.*

(i) *Nursing Training (General Training):*

The following are the results of the examinations held by the Medical Council of Southern Rhodesia during the calendar year 1953:—

	Number of Candidates	*Number Passed*	*Number Failed*
Preliminary Examinations	57	50	7
Preliminary Examinations (Part I only)	71	56	15
Final Examinations	23	21	2

The examinations were held in April, August and December. Four nurses passed the Final Examination with Honours, two of whom were awarded gold medals presented by the local branch of the British Medical Association.

(ii) *Laboratory Technicians.*

In examinations in 1953, one candidate presented himself for the Intermediate Examination and passed.

(iii) *Native Nursing Orderlies.*

The results of the Lower and Higher Examinations for Native Nursing Orderlies held in June and December are:—

	Number of Candidates	*Number Passed*	*Number Failed*
Lower Examination	87	55	32
Higher Examination	66	52	14

(iv) *Native Health Demonstrators.*

An examination for Native Health Demonstrators was held in November, 1953. Twelve candidates entered and ten passed.

(5) *Military Pensions.*

The following medical boards on military pensioners were conducted during 1953, the personnel for the boards being found from the ranks of Government Medical Officers with Honorary Hospital Consultants called in for special cases:—

Southern Rhodesia Pensioners—	
European	152
Coloured	5
African	4
New Claims for Pensions—Southern Rhodesia	10
Pensioners Examined for Imperial Government	175
Pensioners examined for Union of South Africa	67
Pensioners examined for elsewhere in the Empire	3
TOTAL	416

(6) *St. John Ambulance and Red Cross Associations.*

These voluntary societies continue to give devoted service to the public of the Colony. In friendly rivalry and through the means of a Joint Committee, they devote their efforts to aspects of medical and health work, which it would be difficult, if not impossible, for a Government Department to undertake.

The Red Cross Society has expanded its activities in all the fields which were listed in last year's Report. There have been great increases in occupational therapy, in general and special hospitals, where patients are required to stay for long periods. The work amongst African patients has been very highly appreciated.

The blood transfusion services which are run in conjunction with St. John Ambulance Association, and in co-operation with the medical profession, continue to expand. The African Blood Bank is maintained by blood drawn with the aid of a mobile unit which visits senior schools, industrial concerns and the Rhodesian African Rifles Depot. There is now much less difficulty in persuading healthy Africans to give a donation of blood to help their fellows in need.

The Society has maintained its training facilities, and examinations in First Aid and Nursing were conducted. In conjunction with St. John Ambulance Association, the Red Cross Association staffed the first aid posts at the Rhodes Centenary Exhibition in Bulawayo, during which 3,452 hours of duty were performed, and a total of 1,031 cases treated.

African work is being expanded, and training in First Aid is continued, particularly on mines. In Bulawayo, at Luveve, the African Detachment, with the aid of doctors and senior members of European detachments, conduct baby toddler and ante-natal clinics.

The St. John Ambulance Association have maintained their training programmes and a total of 1,756 certificates were issued including 1,439 for first aid and 59 for home nursing. The demands on the medical comforts depots have increased, particularly for such items as wheeled chairs and crutches. A new development has been the setting up of first aid equipment posts at points along

the Beitbridge – Bulawayo – Victoria Falls road, where there are considerable distances between villages and towns. If the experiment is successful, it is hoped to extend it to other main roads traversing the more sparsely occupied parts of the Colony.

(7) *Habit Forming Drugs.*

Import Certificates numbering 117, and 56 Export Certificates were issued by the Department during 1953.

Drugs	*Imports in Grammes*	*Exports in Grammes*
Medical Opium	16,314·4	599·57
Opium in form of Tinctures	37,604·6	102·3
Morphine Alkaloid	1,836·38	177·42
Cocain Alkaloid	1,024·55	148·6
Codein	3,294·26	268·81
Methorphinan	55·625	8·34
Pethedine	8,924·87	462·29
Phenadoxone	130·464	95·35
Ethyl Morphine	114·813	Nil
Cannabis Indica	32·4	54·43
Amidone	136·464	7·36

The Pharmacy, Poisons and Dangerous Drugs Act became effective at the beginning of the year, and an inspector was appointed under this Act. The Dangerous Drugs Regulations were published during the year, bringing the legislation controlling dangerous (i.e. habit forming) drugs up to date, and in conformity with the requirements of the Permanent Central Opium Board. Inspections were carried out at the premises of all authorized sellers of poisons and, apart from minor technical infringements, conditions were found to be generally satisfactory.

TABLE A.

LEPROSY, 1953

Institution	Race of Patients	Number on Register on 1.1.53	Admissions	Readmitted for Treatment and Returned Absconders	Discharged Cured or Arrested	Deserted	Died	Number on Register, 31.12.53	Total Treated	Babies Born
Ngomahuru	European	1	—	—	1	—	—	—	1	—
	Coloured	—	—	—	—	—	—	—	—	—
	African	914	171	30	292	30	13	781	1,115	19
Mtemwa	African	805	124	72	155	64	15	767	1,001	28
TOTAL		1,720	295	102	448	94	28	1,548	2,117	47

TABLE B.

GOVERNMENT NATIVE CLINICS, 1953

Government Medical Officers	Clinic	Admissions			In-patient Units			Deaths			Out-patients			Out-patient Treatments			Number of Beds
		V.D.	Other	Total	V.D.	Other	Total	V.D.	Other	Total	V.D.	Other	Total	V.D.	Other	Total	
Antelope	Antelope	48	1,239	1,287	424	14,371	14,795	—	27	27	489	3,208	3,697	2,440	11,302	13,742	192
	Kezi	19	196	215	154	2,309	2,463	—	5	5	206	1,885	2,091	943	10,343	11,286	48
Banket	Banket	167	1,437	1,604	2,149	9,411	11,560	—	40	40	168	4,998	5,166	599	25,474	26,073	48
	Chinomwe	111	1,294	1,405	821	9,823	10,644	—	18	18	123	4,583	4,706	541	23,521	24,062	15
	Darwendale	53	164	217	1,062	4,280	5,342	—	13	13	108	4,552	4,660	249	19,396	19,645	48
Belingwe	Belingwe	193	1,544	1,737	2,492	20,270	22,762	1	56	57	150	1,340	1,490	589	5,636	6,225	48
	Lundi	266	1,504	1,770	2,557	22,710	25,267	—	22	22	329	3,733	4,062	883	18,661	19,544	48
	Shabani	—	—	—	—	—	—	—	—	—	725	11,645	12,370	2,907	50,396	53,303	—
Bindura	Madziwa	145	1,844	1,989	2,034	16,447	18,481	—	15	15	—	5,315	5,315	—	13,891	13,891	48
	Mt. Darwin	131	1,355	1,486	2,223	18,375	20,598	1	36	37	177	3,426	3,603	470	7,630	8,100	24
	Shamva	516	1,621	2,137	13,728	19,855	33,583	—	33	33	598	3,303	3,901	3,162	13,571	16,733	39
Bulawayo	Luveve	2	1,110	1,112	12	7,992	8,004	—	—	—	352	6,785	7,137	1,065	30,661	31,726	30
	Matobo	10	178	188	68	2,120	2,188	—	1	1	52	2,035	2,087	365	8,274	8,639	30
Chindamora	Makumbi	124	2,997	3,121	1,774	47,646	49,420	—	72	72	1,216	12,254	13,470	4,315	68,645	72,960	60
Chipinga (*a*)	Birchenough	63	958	1,021	758	11,498	12,256	—	5	5	117	3,215	3,332	358	9,834	10,192	48
	Nyanyadzi	109	1,481	1,590	1,852	15,222	17,074	1	13	14	76	5,912	5,988	397	26,795	27,192	48
Concession	Concession	232	1,295	1,527	3,057	18,826	21,883	—	82	82	44	3,509	3,553	313	23,447	23,760	96
	Rosa	191	1,834	2,025	1,618	9,626	11,244	—	9	9	95	8,934	9,029	547	14,511	15,058	48
Enkeldoorn	Buhera	54	668	722	1,212	12,065	13,277	—	3	3	417	4,660	5,077	1,107	11,318	12,425	48
	Narira	55	1,385	1,440	783	9,974	10,757	—	10	10	339	5,671	6,010	977	11,041	12,018	48
	Range	143	65	208	3,960	1,237	5,197	—	2	2	321	1,212	1,533	1,099	2,680	3,779	36
	Sadza	18	1,184	1,202	201	9,152	9,353	—	7	7	231	6,984	7,215	648	15,598	16,246	48
	Umgesi	49	1,647	1,696	519	8,458	8,977	—	19	19	52	3,724	3,776	234	8,523	8,757	48
Essexvale	Essexvale	72	943	1,015	2,568	16,032	18,600	1	10	11	55	2,721	2,776	449	11,231	11,680	60
Filabusi	Filabusi	119	1,870	1,989	3,259	30,083	33,342	—	74	74	20	1,436	1,456	156	5,901	6,057	120
Fort Victoria	Chibi	301	3,224	3,525	7,355	33,029	40,384	—	16	16	—	4,315	4,315	—	9,628	9,628	48
	Matibi	353	2,714	3,067	7,225	35,406	42,631	—	8	8	197	2,642	2,839	980	10,446	11,426	30
Gatooma	Gokwe	184	617	801	4,205	19,442	23,647	—	12	12	42	756	798	328	15,238	15,566	48
Gwelo	Gwelo N.V.S.	—	—	—	—	—	—	—	—	—	—	1,783	1,783	—	6,605	6,605	—
Hartley	Hartley	334	2,880	3,214	2,841	22,714	25,555	—	67	67	106	10,142	10,248	226	21,689	21,915	48
	Mondoro	164	1,952	2,116	1,983	11,898	13,881	—	7	7	118	11,518	11,636	314	16,222	16,536	48
Inyanga	Inyanga	144	2,179	2,323	1,832	20,128	21,960	—	9	9	167	4,791	4,958	877	23,211	24,088	48
	Tsonzo	252	1,446	1,698	1,110	13,610	14,720	—	21	21	545	5,734	6,279	1,407	10,719	12,126	24
Inyati	Inyati	82	472	554	1,759	7,248	9,007	—	32	32	35	1,196	1,231	192	5,147	5,339	48
	Dagamella	67	262	329	1,602	4,662	6,264	2	2	4	204	1,768	1,972	1,015	10,024	11,039	20
	Nkai	51	246	297	1,398	3,735	5,133	—	7	7	329	748	1,077	1,436	4,288	5,724	20
Karoi	Karoi	93	1,731	1,824	1,114	16,470	17,584	—	57	57	90	4,423	4,513	243	6,989	7,232	48
	Miami	39	406	445	893	5,587	6,480	—	7	7	72	3,535	3,607	414	5,180	5,594	20
	Urungwe	14	368	382	288	4,458	4,746	—	11	11	42	3,235	3,277	128	4,767	4,895	48

TABLE B. (*continued*)

GOVERNMENT NATIVE CLINICS, 1953 (*continued*)

Government Medical Officers	Clinic	Admissions			In-patient Units			Deaths			Out-patients			Out-patient Treatments			Number of Beds
		V.D.	Other	Total	V.D.	Other	Total	V.D.	Other	Total	V.D.	Other	Total	V.D.	Other	Total	
Marandellas	Marandellas	351	2,464	2,815	7,672	32,942	40,614	—	140	140	135	6,004	6,139	442	13,500	13,942	96
	Shiota	153	1,177	1,330	6,149	14,873	21,022	3	20	23	352	6,564	6,916	717	8,952	9,669	60
	Wedza	155	725	880	3,344	9,015	12,359	3	9	12	135	5,465	5,600	372	9,524	9,896	48
Melsetter	Melsetter	—	—	—	—	—	—	—	—	—	66	2,972	3,038	361	16,795	17,156	—
	Biriwiri	61	502	563	662	5,999	6,661	1	11	12	183	2,339	2,522	975	6,484	7,459	48
Morgenster	Jena (*b*)	91	804	895	980	7,323	8,303	—	8	8	251	3,275	3,526	3,018	19,111	22,129	48
Mrewa	Mrewa	83	1,313	1,396	1,117	10,386	11,503	—	55	55	120	10,836	10,956	241	26,024	26,265	68
Mtoko	Mtoko	173	1,761	1,934	3,225	31,375	34,600	—	53	53	557	6,278	6,835	1,827	13,354	15,172	96
	Makosa	181	1,394	1,575	1,412	13,649	15,061	—	4	4	132	5,639	5,771	379	15,007	15,386	48
	Nyamazuwi	103	1,028	1,131	1,435	10,354	11,789	—	2	2	272	4,263	4,535	1,394	9,301	10,695	36
Ndanga	Ndanga	208	7,430	7,638	2,028	63,759	65,787	—	94	94	—	—	—	—	—	3,701	96
	Bikita	93	4,360	4,453	1,413	41,160	42,573	—	53	53	—	—	—	—	—	5,119	60
	Chichidza	65	4,724	4,789	1,424	65,309	66,733	—	40	40	—	—	—	—	—	9,735	60
	Chiduma	16	453	469	363	20,091	20,454	—	8	8	—	—	—	—	—	596	40
	Chikuku	78	2,440	2,518	1,081	34,291	35,372	1	35	36	—	—	—	—	—	6,637	50
	Chingombe	264	7,354	7,618	5,718	92,432	98,150	2	35	37	—	—	—	—	—	16,051	100
	Chitando	179	2,842	3,021	3,545	50,892	54,437	1	27	28	—	—	—	—	—	9,156	50
	Matsai	68	3,251	3,319	1,193	55,883	57,076	—	28	28	—	—	—	—	—	3,006	40
	Sangwe	11	1,071	1,082	498	33,042	33,540	—	25	25	—	—	—	—	—	4,033	40
	Siyawarewa	77	3,369	3,446	1,060	55,140	56,200	1	31	32	—	—	—	—	—	5,353	50
	Ndanga Group (10)	1,059	37,294	38,353	18,323	511,999	530,322	5	376	381	—	—	—	—	—	63,387	586
Norton	Norton	207	1,333	1,540	2,039	8,510	10,549	—	19	19	60	4,709	4,769	303	23,744	24,047	36
Nyamandhlovu	Nyamandhlovu	79	873	952	1,262	15,120	16,382	—	24	24	88	1,457	1,545	222	4,521	4,743	48
	Lupani (*c*)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Sipepa	34	605	639	680	8,211	8,891	—	9	9	280	4,796	5,076	1,058	11,252	12,310	48
	Tjolotjo	209	1,335	1,544	2,497	17,027	19,524	—	17	17	271	7,266	7,537	690	24,905	25,595	48
Plumtree	Plumtree	198	1,444	1,642	1,467	15,520	16,987	—	23	23	457	4,618	5,075	1,519	11,612	13,131	48
	Lady Mary Baring	64	397	461	578	5,400	5,978	1	2	3	184	1,957	2,141	1,208	16,310	17,518	10
	Mphoengs	119	587	706	816	5,549	6,365	—	3	3	261	2,407	2,668	445	5,414	5,859	30
	Stanley	45	296	341	280	3,265	3,545	—	8	8	253	1,868	2,121	932	8,418	9,350	6
Que Que	Loreto	111	2,651	2,762	1,471	26,089	27,560	1	17	18	669	15,451	16,120	3,675	43,313	46,988	60
Rusape	Chiduku (*d*)	11	124	135	153	1,422	1,575	1	—	1	56	1,203	1,259	437	9,289	9,726	15
	Makoni	33	1,347	1,380	437	11,014	11,451	—	12	12	174	6,395	6,569	1,546	35,117	36,663	48
	Nedewedzo	28	868	896	313	7,025	7,338	—	12	12	42	7,397	7,439	349	32,240	32,589	48

TABLE B. (*continued*)

GOVERNMENT NATIVE CLINICS, 1953 (*continued*)

Government Medical Officers	Clinic	Admissions			In-patient Units			Deaths			Out-patients			Out-patient Treatments			Number of Beds
		V.D.	Other	Total	V.D.	Other	Total	V.D.	Other	Total	V.D.	Other	Total	V.D.	Other	Total	
Salisbury	Highfield	—	1,523	1,523	—	16,744	16,744	—	1	1	408	11,693	12,101	4,262	55,998	60,260	48
Selukwe	Selukwe	—	1,397	1,397	—	13,415	13,415	—	33	33	—	6,553	6,553	—	15,901	15,901	24
	Dzwamabande	219	2,720	2,939	2,391	12,701	15,092	—	23	23	102	4,531	4,633	687	12,739	13,426	48
	Sebanga	259	—	259	3,995	—	3,995	—	—	—	39	—	39	306	—	306	48
	Mabadzenge	—	—	—	—	—	—	—	—	—	—	4,979	4,979	—	6,873	6,873	—
Sinoia	Kutama	6	748	754	20	4,130	4,150	—	8	8	52	8,591	8,643	155	25,679	25,834	20
Umtali	Maranke	20	532	552	263	6,146	6,409	—	7	7	156	2,155	2,311	1,716	7,923	9,639	48
	Odzi	221	978	1,199	4,114	10,374	14,488	—	3	3	111	2,614	2,725	550	15,601	16,151	48
Umvukwes	Arrowan	106	1,561	1,667	1,067	20,364	21,431	—	43	43	200	2,227	2,427	567	6,798	7,365	24
	Sipolilo	20	933	953	169	10,089	10,258	—	17	17	24	4,063	4,087	42	19,722	19,764	48
Umvuma	Umvuma	201	2,546	2,747	4,431	29,890	34,321	1	67	68	73	5,020	5,093	568	10,454	11,022	48
	Chilimanzi	246	2,291	2,537	3,128	20,467	23,595	1	24	25	59	2,609	2,668	359	13,354	13,713	48
	Chinyika	27	1,749	1,776	721	16,612	17,333	—	4	4	—	8,105	8,105	—	19,993	19,993	15
	Gutu	76	1,555	1,631	2,840	27,135	29,975	—	31	31	20	4,239	4,259	600	23,893	24,493	48
Victoria Falls	Victoria Falls	—	—	—	—	—	—	—	—	—	20	1,042	1,062	132	15,886	16,018	—
Wankie	Lukosi	199	543	742	2,636	9,149	11,785	—	11	11	25	3,403	3,428	273	20,564	20,837	48
TOTAL (at 31.12.53) (87)		10,116	127,708	137,824	167,977	1,505,452	1,670,429	23	1,924	1,947	14,694	358,609	373,303	64,700	1,233,989	1,298,689	3,966

(*a*) Chipinga Clinic is now administered as a hospital. (*b*) Supervised by a missionary doctor. (*c*) Lupani closed down 15th January, 1953. (*d*) Chiduku closed down 31st October, 1953.

CLASSIFICATION OF EUROPEAN DEATHS, 1953

Classified according to the International Statistical Classification of Diseases, Injuries and Causes of Death

SIXTH DECENNIAL REVISION

INTERMEDIATE LIST

International List No.	Cause Groups	Detailed List Numbers included	Male	Female	Total
A. 1	Tuberculosis of respiratory system	001, 002	8	2	10
A. 2	Tuberculosis of meninges and central nervous system	010	—	1	1
A. 4	Tuberculosis of bones and joints	012	1	—	1
A. 8	Tabes dorsalis	024	1	—	1
A. 10	All other syphilis	022, 023, 026	3	1	4
A. 12	Typhoid fever	040	1	—	1
A. 15	Brucellosis (undulant fever)	044	—	1	1
A. 16	Dysentery, all forma	045	1	—	1
A. 17	Scarlet fever	050	—	1	1
A. 22	Whooping cough	056	1	—	1
A. 23	Meningococcal infections	057	2	2	4
A. 28	Acute poliomyelitis	080	1	1	2
A. 29	Acute infectious encephalitis	082	3	1	4
A. 32	Measles	085	1	—	1
A. 34	Infectious hepatitis	092	1	—	1
A. 36	Typhus and other rickettsial diseases	104	1	1	2
A. 37	Malaria	115, 116	3	4	7
A. 44	Malignant neoplasm of buccal cavity and pharynx	141, 144, 145	1	2	3
A. 45	Malignant neoplasm of oesophagus	150	2	1	3
A. 46	Malignant neoplasm of stomach	151	18	12	30
A. 47	Malignant neoplasm of intestine, except rectum	152, 153	12	4	16
A. 48	Malignant neoplasm of rectum	154	4	2	6
A. 49	Malignant neoplasm of larynx	161	2	1	3
A. 50	Malignant neoplasm of trachea, and of bronchus and lung not specified as secondary	162, 163	18	3	21
A. 51	Malignant neoplasm of breast	170	—	14	14
A. 52	Malignant neoplasm of cervix uteri	171	—	1	1
A. 53	Malignant neoplasm of other and unspecified parts of uterus	173, 174	—	6	6
A. 54	Malignant neoplasm of prostate	177	5	—	5
A. 55	Malignant neoplasm of skin	191	—	1	1
A. 56	Malignant neoplasm of bone and connective tissue	196, 197	2	—	2
A. 57	Malignant neoplasm of all other and unspecified sites	155, 156, 157, 158 164, 175, 176, 180 181, 193, 194, 198 199	19	24	43
A. 58	Leukaemia and aleukaemia	204	3	4	7
A. 59	Lymphosarcoma and other neoplasms of lymphatic and haematopoietic system	200, 201	4	1	5
A. 60	Benign neoplasms and neoplasms of unspecified nature	237, 239	1	2	3
A. 62	Thyrotoxicosis with or without goitre	252	—	1	1
A. 63	Diabetes mellitus	260	3	4	7
A. 65	Anaemias	292, 293	1	1	2
A. 66	Allergic disorders; all other endocrine, metabolic and blood diseases	241, 287, 289, 294 295, 296	8	3	11
A. 67	Psychoses	306	—	1	1
A. 68	Psychoneuroses and disorders of personality	322	2	—	2
A. 69	Mental deficiency	325	1	—	1
A. 70	Vascular lesions affecting central nervous system	331, 332, 334	32	42	74
A. 71	Non-meningococcal meningitis	340	1	—	1
A. 73	Epilepsy	353	3	—	3
A. 78	All other diseases of the nervous system	343, 350, 352	5	3	8
A. 79	Rheumatic fever	400, 401	2	3	5
A. 80	Chronic rheumatic heart disease	410, 413, 414, 415 416	5	10	15
A. 81	Arteriosclerotic and degenerative heart disease	420, 421, 422	107	56	163
A. 82	Other diseases of heart	430, 433, 434	12	8	20
A. 83	Hypertension with heart disease	440, 442, 443	14	5	19
A. 84	Hypertension without mention of heart	444, 446, 447	8	12	20
A. 85	Diseases of arteries	450, 451, 452, 453 454, 455	10	11	21
A. 86	Other diseases of circulatory system	462, 463, 465, 466	3	2	5
A. 87	Acute upper respiratory infections	473, 474	1	1	2
A. 88	Influenza	480, 481	2	1	3
A. 89	Lobar pneumonia	490	7	—	7
A. 90	Bronchopneumonia	491	9	8	17
A. 91	Primary atypical, other and unspecified pneumonia	492, 493	2	2	4
A. 92	Acute bronchitis	500	1	—	1
A. 93	Bronchitis, chronic and unqualified	501, 502	9	1	10
A. 94	Hypertrophy of tonsils and adenoids	510	1	—	1
A. 95	Empyema and abscess of lung	518	1	—	1
A. 96	Pleurisy	519	1	—	1
A. 97	All other respiratory diseases	522, 523, 525 526, 527	6	3	9
A. 99	Ulcer of stomach	540	4	1	5

CLASSIFICATION OF EUROPEAN DEATHS, 1953 (*continued*)

International List No.	Cause Groups	Detailed List Numbers included	Male	Female	Total
A. 100	Ulcer of duodenum	541	5	3	8
A. 102	Appendicitis	550, 551, 553	2	3	5
A. 103	Intestinal obstruction and hernia	560, 561, 570	7	6	13
A. 104	Gastro-enteritis and colitis, except diarrhoea of the new-born	571, 572	8	4	12
A. 105	Cirrhosis of liver	581	7	3	10
A. 106	Cholelithiosis and cholecystitis	584, 585	1	1	2
A. 107	Other diseases of digestive system	578, 580, 583 586, 587	6	5	11
A. 108	Acute nephritis	590	1	—	1
A. 109	Chronic, other and unspecified nephritis	592, 593	11	7	18
A. 110	Infections of kidney	600	1	1	2
A. 112	Hyperplasia of prostate	610	3	—	3
A. 114	Other diseases of genito-urinary system	601, 606, 633, 637	1	3	4
A. 115	Sepsis of pregnancy, childbirth and the puerperium	682	—	1	1
A. 117	Haemorrhage of pregnancy and childbirth	672	—	1	1
A. 118	Abortion without mention of sepsis or toxaemia	650	—	1	1
A. 120	Other complications of pregnancy, childbirth and the puerperium	645, 675, 678	—	3	3
A. 122	Arthritis and spondylitis	722	1	—	1
A. 125	Ankylosis and acquired musculoskeletal deformities	737	—	1	1
A. 126	All other diseases of skin and musculoskeletal system	701, 744	1	1	2
A. 127	Spina bifida and meningocele	751	—	3	3
A. 128	Congenital malformations of circulatory system	754	3	2	5
A. 129	All other congenital malformations	750, 753, 756 758, 759	7	4	11
A. 130	Birth injuries	760, 761	9	7	16
A. 131	Post-natal asphyxia and atelectasis	762	3	6	9
A. 132	Infections of new-born	763	4	—	4
A. 133	Haemolytic disease of new-born	770	2	1	3
A. 134	All other defined diseases of early infancy	769	—	2	2
A. 135	Ill-defined diseases peculiar to early infancy, and immaturity unqualified	773, 774, 776	20	14	34
A. 136	Senility without mention of psychosis	794	6	4	10
A. 137	Ill-defined and unknown causes of morbidity and mortality	782, 745	6	1	7
A. 138	Motor vehicle accidents	E. 810, E. 821, E. 816 E. 819, E. 821, E. 822 E. 823, E. 825	24	9	33
AE. 139	Other transport accidents	E. 800, E. 845, E. 860 E. 866	11	—	11
AE. 140	Accidental poisoning	E. 872, E. 875, E. 878 E. 888	1	3	4
AE. 141	Accidental falls	E. 902, E. 904	3	—	3
AE. 142	Accident caused by machinery	E. 912	1	—	1
AE. 143	Accident caused by fire and explosion of combustible material	E. 916	4	—	4
AE. 145	Accident caused by fire-arm	E. 919	2	—	2
AE. 146	Accidental drowning and submersion	E. 929	5	1	6
AE. 147	All other accidental causes	E. 921, E. 925, E. 927, E. 928, E. 934, E. 936	14	20	34
AE. 148	Suicide and self-inflicted injury	E. 971, E. 973, E. 974 E. 976, E. 977	18	2	20
AE. 149	Homicide and injury purposely inflicted by other persons (not in war)	E. 981, E. 982	3	—	3
		TOTAL	581	395	976

TABLE D.

ADMISSIONS TO GOVERNMENT HOSPITALS AND OUT-PATIENT ATTENDANCES, 1953

HOSPITAL	ADMISSIONS				DEATHS				OUT-PATIENT ATTENDANCES			
	European	Coloured and Asiatic	African	Total	European	Coloured and Asiatic	African	Total	European	Coloured and Asiatic	African	Total
General:												
Salisbury	4,503	456	13,412	18,371	124	12	597	733	30,957	1,750	161,263	193,970
Bulawayo	6,128	620	8,952	15,700	138	19	540	697	13,689	1,406	176,109	191,204
Bindura	285	—	1,397	1,682	6	—	87	93	919	—	10,942	11,861
Chipinga (*a*)	222	—	2,015	2,237	1	—	23	24	1,358	—	14,607	15,965
Enkeldoorn	208	3	1,718	1,929	3	—	66	69	118	—	2,754	2,872
Filabusi (*b*)	24	—	—	24	2	—	—	2	108	—	—	108
Fort Victoria	589	16	2,934	3,539	8	—	131	139	908	220	28,178	29,306
Gatooma	1,121	139	7,383	8,643	20	—	306	326	155	20	28,640	28,815
Gwanda	205	56	3,429	3,690	3	—	91	94	342	82	15,388	15,812
Gwelo	1,582	125	4,601	6,308	27	4	206	237	2,742	152	35,033	37,927
Marandellas	224	—	—	224	5	—	—	5	1,214	—	—	1,214
Que Que	678	50	2,600	3,328	23	—	167	190	485	13	5,686	6,184
Rusape	406	24	4,302	4,732	8	—	80	88	961	87	44,289	45,337
Selukwe	209	—	—	209	5	—	—	5	166	—	—	166
Sinoia	574	—	4,465	5,039	5	—	153	158	520	88	22,424	23,032
Umtali	1,580	174	3,962	5,716	29	3	202	234	2,551	391	32,539	35,481
TOTAL (16)	18,538	1,663	61,170	81,371	407	38	2,649	3,094	57,193	4,209	577,852	639,254
Special:												
Ingutsheni	113	3	443	559	16	—	90	106	—	—	—	—
Nervous Disorders	188	—	—	188	2	—	—	2	362	—	—	362
Martin T.B. Sanatorium	—	—	124	124	—	—	10	10	—	—	57	57
Harari Maternity	—	—	2,886	2,886	—	—	13	13	—	—	4,145	4,145
Mpilo Maternity	—	—	3,772	3,772	—	—	11	11	—	—	11,317	11,317
TOTAL (5)	301	3	7,225	7,529	18	—	124	142	362	—	15,519	15,881
GRAND TOTAL	18,839	1,666	68,395	88,900	425	38	2,773	3,236	57,555	4,209	593,371	655,135

(*a*) Chipinga Clinic now classed as a Hospital.

(*b*) Opened 1st September, 1953.

TABLE E.

STAFFING, BEDS AND PATIENTS, GOVERNMENT HOSPITALS, 1953

HOSPITAL	NURSING STAFF			NUMBER OF BEDS			NUMBER OF IN-PATIENTS*				IN-PATIENT DAILY AVERAGE			NUMBER OF IN-PATIENT UNITS MAINTAINED				AVERAGE STAY IN HOSPITAL IN DAYS		
	European	Coloured and Asiatic	African	European	Coloured and Asiatic	African	European	Coloured and Asiatic	African	Total	European	Coloured and Asiatic	African	European	Coloured and Asiatic	African	Total	European	Coloured and Asiatic	African
GENERAL:																				
Salisbury	117	13	92	162	22	284	4,503	456	13,412	18,371	141·4	10·9	379·6	51,619	3,982	138,568	194,169	11·5	8·7	10·3
Bulawayo	136	8	112	244	30	337	6,280	633	9,253	16,166	193·6	21·5	323·6	70,665	7,848	118,128	196,641	11·3	12·4	12·8
Bindura	7	—	15	12	—	35	292	—	1,418	1,710	5·6	—	58·2	2,048	—	21,242	23,290	7·0	—	15·0
Chipinga†	5	—	11	14	—	36	226	—	2,099	2,325	3·7	—	77·9	1,363	—	28,447	29,810	6·0	—	13·5
Enkeldoorn	7	—	15	11	—	43	213	3	1,783	1,999	4·9	—	53·0	1,793	16	19,357	21,166	8·4	5·0	10·9
Filabusi‡	4	—	—	11	—	—	24	—	—	24	1·2	—	—	151	—	—	151	6·3	—	—
Fort Victoria	8	—	15	24	1	34	602	16	3,017	3,635	11·8	0·3	99·5	4,297	94	36,310	40,701	7·1	6·0	12·0
Gatooma	22	3	50	44	12	240	1,138	143	7,655	8,936	19·4	5·6	273·2	7,083	2,069	99,735	108,887	6·2	14·5	13·0
Gwanda	6	—	20	6	3	86	207	56	3,524	3,787	3·3	0·6	96·0	1,211	210	35,032	36,453	5·8	3·7	9·9
Gwelo	25	7	26	61	14	72	1,609	127	4,726	6,462	42·4	2·8	127·6	15,484	1,011	46,578	63,073	9·6	8·0	9·8
Marandellas	5	—	—	10	—	—	228	—	—	228	4·4	—	—	1,607	—	—	1,607	7·0	—	—
Que Que	17	—	21	25	10	92	693	50	2,662	3,405	18·0	0·9	92·6	6,538	334	33,787	40,659	9·4	6·7	12·7
Rusape	6	—	15	15	4	45	409	25	4,387	4,821	6·0	0·3	91·6	2,207	96	33,435	35,738	5·4	4·0	7·6
Selukwe	5	—	—	12	—	—	215	—	—	215	5·4	—	—	1,957	—	—	1,957	9·1	—	—
Sinoia	12	—	11	17	—	87	574	—	4,552	5,126	8·6	—	130·3	3,143	—	47,565	50,708	5·5	—	10·4
Umtali	22	4	15	77	8	80	1,608	177	4,083	5,868	35·8	5·4	121·7	13,059	1,958	44,439	59,456	8·1	11·1	10·9
TOTAL	404	35	418	745	104	1,471	18,821	1,686	62,571	83,078	504·7	48·3	1,925·0	184,225	17,618	702,623	904,466	9·8	10·4	11·2
SPECIAL:																				
Ingutsheni	43	—	81	136	—	580	317	32	1,312	1,661	172·8	25·8	940·9	63,078	9,402	343,421	415,901	190·0	293·8	261·7
Nervous Disorders	5	—	—	23	—	—	195	—	—	195	12·4	—	—	4,514	—	—	4,514	23·1	—	—
Martin T.B. Sanatorium	4	—	19	—	—	150	—	—	247	247	—	—	171·0	—	—	62,416	62,416	—	—	232·7
Harari Maternity	3	—	30	—	—	56	—	—	2,927	2,927	—	—	47·4	—	—	17,313	17,313	—	—	5·9
Mpilo Maternity	3	—	36	—	—	65	—	—	3,808	3,808	—	—	48·3	—	—	17,624	17,624	—	—	4·6
TOTAL	58	—	166	159	—	851	512	32	8,294	8,838	185·2	25·8	1,207·6	67,592	9,402	440,774	517,768	132·0	293·8	53·1
GRAND TOTAL	462	35	584	904	104	2,322	19,333	1,718	70,865	91,916	689·9	74·0	3,132·6	251,817	27,020	1,143,397	1,422,234	13·0	15·7	16·1

* Includes patients in hospital on 1st January, 1953. † Chipinga Clinic is now classed as a Hospital. ‡ Opened 1st September, 1953.

TABLE F.

ADMISSIONS TO GOVERNMENT GENERAL HOSPITALS, 1953, OF CASES OF CERTAIN SPECIFIED DISEASES

HOSPITAL	MALARIA						BLACKWATER FEVER						DYSENTERY						PNEUMONIA						TYPHOID FEVER					
	European		Coloured and Asiatic		African		European		Coloured and Asiatic		African		European		Coloured and Asiatic		African		European		Coloured and Asiatic		African		European		Coloured and Asiatic		African	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Salisbury	87	—	5	—	196	8	3	—	—	—	—	—	14	—	2	—	71	—	118	7	26	3	950	153	12	—	2	—	25	5
Bulawayo	47	—	12	—	200	4	—	—	—	—	—	—	47	—	6	—	157	5	190	9	46	1	774	123	—	—	—	—	27	5
Bindura	61	1	—	—	55	4	—	—	—	—	—	—	—	—	—	—	9	4	11	—	—	—	86	16	—	—	—	—	3	2
Chipinga	13	—	—	—	272	—	—	—	—	—	—	—	3	—	—	—	31	—	6	—	—	—	16	—	—	—	—	—	1	—
Enkeldoorn	19	—	—	—	179	10	—	—	—	—	—	—	3	—	—	—	22	—	6	—	—	—	72	9	1	—	—	—	15	4
Filabusi	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fort Victoria	46	—	3	—	122	3	1	—	—	—	—	—	25	—	—	—	18	5	23	1	1	—	85	22	4	—	—	—	7	—
Gatooma	150	2	16	—	863	25	1	1	—	—	1	1	17	—	3	—	80	3	47	2	5	—	343	42	1	—	—	—	19	—
Gwanda	4	1	5	—	121	—	—	—	—	—	—	—	6	—	—	—	9	—	12	—	1	—	48	14	—	—	—	—	3	—
Gwelo	24	—	2	1	168	—	—	—	—	—	—	—	159	2	5	—	134	2	51	2	—	—	158	22	3	—	—	—	4	—
Marandellas	6	—	—	—	—	—	—	—	—	—	—	—	3	—	—	—	—	—	9	1	—	—	—	—	1	—	—	—	—	—
Que Que	43	—	8	—	201	7	—	—	—	—	—	—	3	—	—	—	7	—	19	—	—	—	60	4	—	—	—	—	2	1
Rusape	20	—	—	—	197	4	—	—	—	—	—	—	1	—	1	—	99	6	—	—	—	—	143	10	—	—	—	—	7	5
Selukwe	9	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	9	—	—	—	—	—	—	—	—	—	—	—
Sinoia	55	—	—	—	256	4	—	—	—	—	—	—	40	—	—	—	133	13	9	—	—	—	152	25	—	—	—	—	25	3
Umtali	76	—	11	—	341	6	—	—	—	—	—	—	2	—	1	—	8	—	35	1	4	—	306	27	11	—	—	—	33	2
TOTAL	660	4	62	1	3,171	75	5	1	—	—	1	1	325	2	18	—	778	38	545	23	83	4	3,193	467	33	—	2	—	171	27

MEDICAL MISSIONS, 1953

MISSIONS GROUPED BY DENOMINATION	ADMISSIONS			IN-PATIENT UNITS			DEATHS			OUT-PATIENTS			OUT-PATIENT ATTENDANCES			STAFF (RESIDENT)			BEDS	
	V.D.	Other	Total	V.D.	Other	Total	V.D.	Other	Total	V.D.	Other	Total	V.D.	Other	Total	Medical	Nursing	Auxiliary	Authorized for Grants	Total
American Board:																				
Chikore	24	803	827	150	4,322	4,472	—	5	5	591	4,972	5,563	391	4,000	4,391	—	1	2	16	16
Mount Selinda	105	1,606	1,711	1,027	20,754	21,781	—	48	48	88	1,948	2,036	930	5,523	6,453	1	3	3	50	50
Anglican:																				
St. Augustine's	—	—	—	—	—	—	—	—	—	56	7,089	7,145	523	10,983	11,506	—	1	2	—	—
St. David's, Bonda	345	2,376	2,721	5,066	33,075	38,141	5	42	47	195	4,539	4,734	2,946	10,424	13,370	1	4	1	117	150
St. Faith's	—	88	88	—	414	414	—	1	1	65	8,264	8,329	553	8,645	9,198	—	1	1	—	8
St. Patrick's	—	436	436	—	3,386	3,386	—	6	6	182	2,689	2,871	808	5,671	6,479	—	1	2	12	12
Brethren in Christ:																				
Matopo	7	159	166	12	1,093	1,105	—	—	—	50	580	630	500	9,873	10,373	—	1	1	—	11
Mtshabezi	173	1,032	1,205	1,160	18,186	19,346	—	16	16	114	3,123	3,237	1,064	17,420	18,484	1	1	4	32	40
Church of Christ:																				
Nhowe	202	275	477	1,126	1,254	2,380	—	3	3	185	347	532	1,026	1,399	2,425	1	1	1	8	17
Dutch Reformed Church:																				
Gutu	37	1,444	1,481	541	12,503	13,044	1	67	68	643	26,567	27,210	3,979	31,490	35,469	1	2	5	18	18
Morgenster	—	2,668	2,668	—	31,701	31,701	—	43	43	684	7,377	8,061	7,368	43,079	50,447	3	4	5	81	94
Elim Missions:																				
Elim, Inyanga	10	1,840	1,850	116	5,768	5,884	—	4	4	106	5,533	5,639	278	23,513	23,791	1	—	—	—	—
Evangelical Alliance:																				
Mavuradontha	8	55	63	41	314	355	—	—	—	8	2,818	2,826	41	6,788	6,829	—	1	—	—	—
Mzengedzi	1	32	33	8	237	245	—	4	4	45	3,232	3,277	311	8,587	8,898	—	1	—	—	1
Rukomitchi	—	—	—	—	—	—	—	—	—	1	2,476	2,477	10	3,118	3,128	—	1	—	—	—
Rusambo	—	—	—	—	—	—	—	—	—	6	3,288	3,294	48	3,502	3,550	—	1	—	—	—
Free Methodist Church of North America:																				
Chikombedzi	2	104	106	9	1,455	1,464	1	5	6	31	6,370	6,401	199	18,352	18,551	1	—	—	4	12
Lundi	—	—	—	—	—	—	—	—	—	64	7,674	7,738	273	46,044	46,317	—	—	—	—	—
Free Presbyterian Church of Scotland:																				
Zenka	—	—	—	—	—	—	—	—	—	15	3,446	3,461	86	5,221	5,307	—	1	—	—	—
London Missionary Society:																				
Dombodema	3	103	106	19	678	697	1	4	5	43	3,668	3,711	327	3,148	3,475	—	1	—	2	4
Methodist Episcopal:																				
Mutambara	235	1,045	1,280	3,760	12,815	16,575	3	10	13	1,908	2,454	4,362	18,500	19,692	38,192	—	1	2	35	35
Nyaderi	195	4,319	4,514	1,544	27,603	29,147	1	71	72	2	1,207	1,209	10	12,899	12,909	1	2	6	51	55
Old Umtali	15	776	791	152	6,400	6,552	—	16	16	51	1,501	1,552	373	12,393	12,766	—	1	4	30	35

MEDICAL MISSIONS, 1953 (*continued*)

MISSIONS GROUPED BY DENOMINATION	ADMISSIONS			IN-PATIENT UNITS			DEATHS			OUT-PATIENTS			OUT-PATIENT ATTENDANCES			STAFF (RESIDENT)			BEDS	
	V.D.	Other	Total	V.D.	Other	Total	V.D.	Other	Total	V.D.	Other	Total	V.D.	Other	Total	Medical	Nursing	Auxiliary	Authorized for Grants	Total
Roman Catholic:																				
All Souls', Mtoko	9	557	566	88	2,914	3,002	—	4	4	129	4,961	5,090	644	20,823	21,467	—	1	1	16	16
Chishiwasha	10	198	208	384	1,438	1,822	1	3	4	334	13,929	14,263	1,484	30,652	32,136	—	1	1	5	5
Driefontein	62	753	815	382	5,244	5,626	4	10	14	702	5,446	6,148	3,987	10,902	14,889	—	1	1	8	8
Empandeni	—	367	367	—	4,306	4,306	—	2	2	379	4,962	5,341	1,555	54,496	56,051	—	1	—	12	26
Fatima	184	1,159	1,343	2,578	15,233	17,811	3	16	19	661	9,811	10,472	5,013	18,205	23,218	1	2	—	40	80
Gokomere	195	1,909	2,104	425	5,941	6,366	—	2	2	407	5,556	5,963	1,914	7,080	8,994	—	1	—	19	19
Holy Cross	118	798	916	1,143	10,963	12,106	—	19	19	1,641	5,492	7,133	15,476	12,392	27,868	—	1	—	6	6
Monte Cassino	9	404	413	163	2,587	2,750	1	3	4	31	981	1,012	253	44,487	44,740	—	1	—	4	10
Mount Melleray	54	603	657	378	6,294	6,672	—	13	13	87	3,111	3,198	435	7,482	7,917	1	1	—	—	6
Mukaro	87	1,198	1,285	539	8,990	9,529	—	5	5	682	13,261	13,943	2,835	53,898	56,733	—	1	—	—	3
Silveira	437	2,001	2,438	2,526	18,840	21,366	—	39	39	432	9,642	10,074	1,917	27,642	29,559	1	2	1	24	28
St. Anthony's, Zaka	—	—	—	—	—	—	—	—	—	324	6,850	7,174	2,384	49,784	52,168	—	1	—	—	—
St. Barbara's	56	895	951	488	10,488	10,976	—	3	3	52	6,686	6,738	85	13,892	13,977	—	1	1	25	25
St. Joseph's, Gwelo	101	561	662	809	4,058	4,867	4	12	16	822	11,960	12,782	8,000	32,640	40,640	—	2	—	6	6
St. Joseph's, Semokwe	41	505	546	254	5,612	5,866	—	12	12	1,045	3,094	4,139	3,743	16,261	20,004	—	1	—	15	15
St. Luke's, Bubi	114	845	959	1,242	9,497	10,739	1	25	26	325	4,758	5,083	1,285	7,552	8,837	1	1	1	32	34
St. Michael's, Mondoro	216	1,326	1,542	1,623	10,627	12,250	1	17	18	1,409	7,730	9,139	10,383	61,802	72,185	—	1	—	6	18
St. Paul's, Musami	124	1,597	1,721	3,720	15,604	19,324	2	18	20	151	4,449	4,600	2,539	12,327	14,866	—	1	—	25	25
Triashill	76	945	1,021	864	11,849	12,713	2	8	10	284	4,932	5,216	1,989	12,846	14,835	—	1	—	24	24
Salvation Army:																				
Howard Institute	71	712	783	497	8,106	8,603	—	13	13	8	1,959	1,967	21	10,839	10,860	—	1	2	15	15
Tshelanyemba	227	378	605	1,789	5,254	7,043	1	10	11	1,467	1,693	3,160	7,023	5,552	12,575	—	1	2	8	8
Seventh Day Adventist:																				
Solusi	3	266	269	24	1,493	1,517	1	11	12	—	1,081	1,081	—	3,872	3,872	—	1	2	5	12
South African General Mission:																				
Rusitu	112	210	322	832	1,435	2,267	5	3	8	93	3,018	3,111	1,121	5,802	6,923	—	2	—	8	8
Swedish Mission:																				
Manana	1,305	610	1,915	21,812	12,658	34,470	—	4	4	703	2,247	2,950	9,118	8,682	17,800	—	1	3	25	25
Masase	1,227	511	1,738	31,678	6,111	37,789	—	10	10	529	660	1,189	12,442	3,552	15,994	—	1	3	61	61
Mnene	2,510	1,714	4,224	47,825	39,617	87,442	2	66	68	305	1,715	2,020	2,134	9,115	11,249	1	4	6	175	185
Musume	1,075	819	1,894	22,237	17,657	39,894	—	13	13	482	886	1,368	6,297	5,513	11,810	—	1	2	16	19
Wesleyan Methodist:																				
Epworth	—	—	—	—	—	—	—	—	—	19	2,361	2,380	148	8,679	8,827	—	1	—	—	—
Waddilove	—	750	750	—	5,768	5,768	—	13	13	—	8,736	8,736	—	14,175	14,175	—	1	13	20	22
TOTAL (53)	9,785	41,752	51,537	159,031	430,542	589,573	40	699	739	18,636	263,129	281,765	144,769	882,708	1,027,477	16	66	78	1,056	1,267

TABLE H.

MATERNITY HOMES, 1953

Name	Town	Patients remaining 1–1–53	Admitted	Patients remaining 31–12–53	Died	Confinements	Births		Deaths of Infants	Operations		Beds
							Live	Still		Major	Minor	
Lady Chancellor	Salisbury	32	1,528	33	—	1,449	1,448	22	23	66	607	47
Lady Rodwell	Bulawayo	28	955	18	1	839	828	11	16	48	262	48
Lady Kennedy	Umtali	5	317	8	—	298	295	4	10	17	27	18
Appleby	Bindura	—	53	1	1	47	48	1	1	2	15	5
Birchenough	Gwelo	7	281	3	—	275	275	—	2	—	6	4
Donaldson	Selukwe	—	29	1	—	27	27	—	—	—	—	5
Enkeldoorn	Enkeldoorn	2	26	1	—	26	24	1	1	—	1	3
Fort Victoria	Fort Victoria	1	130	—	—	113	109	4	—	—	3	9
Que Que	Que Que	1	162	3	—	150	148	2	6	6	—	6
Rusape	Rusape	—	76	2	—	71	71	1	1	3	2	2
Sinoia	Sinoia	2	94	2	—	80	80	—	1	1	24	9
Total Government-operated Homes (11)		78	3,652	72	2	3,375	3,353	46	61	143	947	156
Clarison	Bulawayo	7	133	—	—	140	139	—	1	—	—	10
Greenwood Park	Salisbury	3	202	—	—	203	201	2	1	10	9	14
Mater Dei	Bulawayo	—	140	12	—	135	133	2	1	8	—	14
Queen Mary	Gatooma	3	145	2	2	145	144	1	1	12	27	10
White Hollow	Bulawayo	4	117	4	—	117	116	1	4	19	4	5
Total Privately-operated Homes (5)		17	737	18	2	740	733	6	8	49	40	53
GRAND TOTAL		95	4,389	90	4	4,115	4,086	52	69	192	987	209

TABLE I.

EUROPEAN SCHOOLS: FINDINGS OF MEDICAL INSPECTIONS, 1953

ROUTINE MEDICAL EXAMINATIONS	Group 0 K.G. 1	Group 1 K.G. 2, Std. 1	Group 2 Stds. 2 and 3	Group 3 Stds. 4 and 5	Group 4 Forms 1 and 2	Group 5 Forms 3 and 4	Group 6 Forms 5 +	Total
Children examined	2,315	3,555	1,826	2,260	2,164	661	148	12,929
Nutritional State—Good	1,365	2,086	1,145	1,482	1,616	530	124	8,348
Satisfactory	844	1,299	587	718	501	128	24	4,101
Unsatisfactory	106	170	94	60	47	3	—	480
Skin Diseases	70	103	66	75	78	42	6	440
Scalp	5	4	2	3	6	2	1	23
Dental Defects	212	347	105	64	113	27	1	869
E.N.T.—Tonsils and Adenoids—(1) Removed previously	92	288	224	258	324	132	38	1,366
(2) Enlarged	306	339	127	98	98	15	1	984
(3) Removal advised	46	44	21	14	21	1	—	147
Nose	129	250	111	52	34	24	—	600
Ears—Wax, otitis media, etc.	138	205	87	80	104	40	2	656
Defective hearing (slight)	22	36	20	30	35	16	1	160
Defective hearing (marked)	2	—	2	2	2	2	—	10
Speech Defects	7	4	6	6	4	4	—	28
Eyes—Squint	24	47	26	16	14	5	—	132
Other conditions	58	102	54	54	53	11	1	333
Vision—Refractive defects—(1) Observation	21	188	125	187	162	41	14	738
(2) Requiring glasses	2	46	66	63	92	32	7	308
(3) Having glasses	9	19	41	44	84	41	14	252
Other defects	—	4	—	6	5	—	—	15
Heart—Functional disorders	14	27	19	10	26	4	1	101
Organic disease—(1) Rheumatic	1	6	6	4	2	3	1	23
(2) Other	4	7	1	1	3	2	—	18
Lungs—Asthma	3	12	4	3	1	3	1	27
Bronchitis, etc.	43	46	19	16	10	7	—	141
Abdomen—Enlarged spleen	16	28	16	12	22	8	1	103
Other	26	32	33	15	19	3	3	131
Nervous System—Functional disorders	4	9	4	—	5	1	—	23
Results of poliomyelitis	4	7	5	2	4	—	—	22
Other organic disease	3	4	4	2	10	2	—	25
Posture Defects—Spinal	221	434	259	291	286	47	10	1,548
Spinal and flat feet	181	451	278	221	176	56	8	1,371
Flat feet	335	439	263	310	257	87	14	1,705
Deformities—Head, neck and arms	1	5	4	1	2	2	—	15
Spine and Chest	6	16	12	11	9	4	—	58
Hips, legs and feet	230	286	125	121	128	38	5	933
Other Conditions	72	89	47	37	39	14	8	306
Testing for Urinary Bilharziasis—Tests done	—	—	—	—	—	—	—	302
Positive cases	—	—	—	—	—	—	—	91

TABLE J.

COLOURED AND ASIATIC SCHOOLS: FINDINGS OF MEDICAL INSPECTIONS, 1953

ROUTINE MEDICAL EXAMINATIONS	Group 0 K.G. 1	Group 1 K.G. 2, Std. 1	Group 2 Stds. 2 and 3	Group 3 Stds. 4 and 5	Group 4 Forms 1 and 2	Group 5 Forms 3 and 4	Group 6 Forms 5 +	Total
Children examined	304	348	203	223	205	160	44	1,487
Nutritional State—Good	101	133	117	107	153	147	41	799
Satisfactory	192	192	79	114	50	13	3	643
Unsatisfactory	11	23	7	2	2	—	—	45
Skin Diseases	10	18	6	7	1	3	2	47
Scalp	9	17	14	10	8	2	—	60
Dental Defects	35	27	3	8	5	5	3	86
E.N.T.—Tonsils and Adenoids—(1) Removed previously	5	5	4	3	7	1	4	29
(2) Enlarged	33	29	16	14	7	3	2	104
(3) Removal advised	2	8	2	3	—	2	—	17
Nose	17	12	5	1	1	—	—	26
Ears—Wax, otitis media, etc.	17	20	14	8	11	9	5	84
Defective hearing (slight)	1	2	—	4	—	1	3	11
Defective hearing (marked)	—	1	—	—	—	—	—	1
Speech Defects	—	1	—	—	—	—	—	1
Eyes—Squint	1	4	3	—	1	3	—	12
Other conditions	4	6	2	2	2	3	—	19
Vision—Refractive defects—(1) Observation	1	19	20	14	16	20	3	93
(2) Requiring glasses	1	1	4	9	3	8	1	27
(3) Having glasses	1	1	—	—	—	1	1	4
Other defects	—	—	—	—	—	—	—	—
Heart—Functional disorders	1	—	—	—	1	—	—	2
Organic disease—(1) Rheumatic	—	1	—	—	—	—	—	1
(2) Other	1	—	3	1	2	2	1	10
Lungs—Asthma	—	—	—	—	—	—	—	—
Bronchitis, etc.	1	5	2	—	—	1	1	10
Abdomen—Enlarged spleen	6	1	2	3	2	3	—	17
Other	6	6	3	1	1	—	—	17
Nervous System—Functional disorders	—	—	—	—	—	—	1	1
Results of poliomyelitis	—	—	—	—	—	—	—	—
Other organic disease	1	—	1	—	—	—	—	2
Posture Defects—Spinal	56	46	41	40	35	33	6	257
Spinal and flat feet	18	21	19	16	11	9	1	95
Flat feet	27	30	12	22	28	13	10	142
Deformities—Head, neck and arms	—	—	1	—	—	—	—	1
Spine and Chest	—	1	—	1	—	—	—	2
Hips, legs and feet	58	46	18	10	11	11	3	157
Other Conditions	25	10	6	2	7	2	—	52
Testing for Urinary bilharziasis—Tests done	—	—	—	—	—	—	—	390
Positive cases	—	—	—	—	—	—	—	51

REPORT OF THE PUBLIC HEALTH LABORATORY, SALISBURY

	European	*Non-European*	*Total*
BLOOD			
Microscopical:			
Blood Counts, etc.	9,235	3,713	12,948
Blood Films for Parasites	1,879	3,666	5,545
Positive Findings:			
P. falciparum	169	345	
P. vivax	1	1	
P. malariae	1	1	
Trypanosomes	—	1	
Filaria	—	1	
Spirochaetes	—	7	
Cultural:			
Blood Cultures performed	138	429	567
Positive Findings:			
Salmonella Group	6	11	
Other Organisms	7	86	
Serological:			
Agglutination Tests	822	1,037	1,859
Positive Findings:			
Salmonella Group	142	287	
Brucella Group	102	74	
Other Organisms	1	54	
Serological Tests for Syphilis	1,550	34,053	35,603
Gonococcal Complement Fixation Tests	2	2	4
Grouping—Landsteiner	279	485	764
Grouping—Rhesus	752	3	755
Biochemical:			
Estimations performed	626	766	1,392
Miscellaneous:			
Sedimentation rates, Fragility curves, Spectroscopic examinations, etc.	985	398	1,383
URINE			
Chemical Examinations	2,369	1,376	3,745
Centrifuged Deposits examined	8,687	9,040	17,727
Positive Findings:			
S. haematobium	259	2,798	
S. mansoni	7	—	
Miscellaneous parasites	58	4	
Centrifuged Deposits Cultured	804	259	1,063
Positive Findings:			
Salmonella Group	—	1	
Other Organisms	299	23	
Miscellaneous Examinations	63	40	103
SPUTUM			
Stained Films examined	823	1,772	2,595
Bacteriological:			
Specimens Cultured	17	12	29
FAECES			
Direct or Concentrated Films	3,812	8,502	12,314
Positive Findings:			
S. mansoni	20	535	
S. haematobium	2	31	
E. histolytica—trophozoites	8	2	
cysts	7	2	
Miscellaneous parasites	169	1,008	
Bacteriological:			
Specimens cultured	240	280	520
Chemical:			
Estimations or Tests performed	62	21	83
CEREBRO-SPINAL FLUID			
Routine Chemical Examinations	298	1,137	1,435
Routine Bacteriological examinations	224	1,065	1,289
Streptococcus	6	15	
Neisseria	3	45	
Haemophilus	1	6	
Wasserman Reactions	42	132	174

Pus, Exudates, Puncture Fluids

	European	*Non-European*	*Total*
Microscopic:			
Examinations performed	751	1,112	1,863
Cultures:			
Specimens Cultured	1,179	1,882	3,061
Bacteria	281	267	
Fungi	43	2	
Chemical:			
Qualitative or Quantitative examinations performed	17	35	52

Autogenous Vaccines

Number prepared	16	—	16

Animal Inoculations

Friedman Tests	67	—	67
Virulence Tests	13	12	25
Myco. tuberculosis	1	—	
C. diphtheriae	—	—	

Miscellaneous

Water Samples examined	—	—	236
Fractional Test Meals	114	7	121
Glucose Tolerance Curves	18	5	23
Government Analyst, specimens to	42	10	52
Chemical Tests for Pregnancy—Kapeller Adler	138	1	139
Ice Cream Samples examined	—	—	9
Milk Samples examined	—	—	100
Sensitivity Tests performed	262	103	365
Miscellaneous S.A.I.M.R. Exams.	15	81	96

Medico-Legal Examinations

Smears for Spermatozoa, Blood Groups, etc.	11	30	41

Histological Examinations

Post-Mortem examinations	41	927	968
Post-Mortem Histology	13	176	189
Phthisis Bureau Histology	2	82	84
Surgical Histology	600	798	1,398

Total Examinations Made	110,802

UMTALI LABORATORY

	European	*Non-European*	*Total*
Blood			
Microscopical:			
Blood Counts, etc.	2,195	1,894	4,089
Blood Films for Parasites	745	1,219	1,964
Positive Findings:			
P. falciparum	65	221	
P. vivax	1	—	
Cultural:			
Blood Cultures performed	16	32	48
Serological:			
Agglutination Tests	124	278	402
Grouping—Landsteiners	48	77	125
Biochemical:			
Estimations performed	146	104	250
Miscellaneous:			
Sedimentation rates, Fragility curves, Spectroscopic examinations, etc.	173	331	504